

PROCEEDINGS OF THE ROYAL ENTOMOLOGICAL SOCIETY OF LONDON

SERIES C. JOURNAL OF MEETINGS

VOLUME 11

No. 13, 1947

Report of the Council, 1946.

During the past year much time and effort have been spent on endeavouring to restore the Society's activities to a pre-war level in a post-war world. A setback occurred in the spring when the Society lost the services of Mr. F. J. Griffin, who had been its Registrar since 1929. As Fellows know, the administration of the Society's affairs owes much to the energy and foresight of his Registrarship; Council are sure that they will wish him every success in his new appointment with the Society of Chemical Industry. For the remainder of the year the affairs of the Society have been conducted by the Officers, ably assisted by Miss Evans and the assistants who were secured to discharge routine duties in the office and library.

Towards the end of the year Messrs. Richard Clay & Co., Ltd., who have been the Society's printers for some fifty years, intimated that they were unable to continue the printing of scientific periodicals after the end of 1946. On the basis of tenders submitted by a number of printing firms, Messrs. Gale and Polden, Ltd., have been engaged as printers to the Society, but at such greatly increased cost that repercussions must be felt throughout the Society's affairs.

During the summer it was at last found possible to make a start on some of the more urgent repairs to the fabric of the house. Other less essential, but still very desirable work will be put in hand as soon as conditions permit.

It is also gratifying to be able to report that it was possible to revert to holding the customary twelve meetings during the year. This had been attended by some difficulty, more particularly in the provision of refreshments and the issuing of the advance notice to Fellows with such a short interval between meetings. The effort has been amply rewarded by the consistently good attendance of Fellows and Visitors, the average being 67, as compared with 69 in 1945, the latter figure being somewhat misleading owing to the large attendance attracted by a joint meeting with the Royal Meteorological Society. All meetings are now held at 5.30 p.m., an experiment having proved that 8 p.m. is no longer the most popular hour.

Improved communications have enabled the Society to renew and extend contacts with many of its European colleagues and sister institutions.

Nearer home, the Society was represented at the Centenary Celebrations of the Cotteswold Naturalists' Field Club by Fleet Paymaster T. Bainbrigge Fletcher, R.N., who presented an address on behalf of the Society. The Society has also become a Life Member of the newly formed Yorkshire Naturalists' Trust, Ltd.

Much of the detailed business of the Society has, as hitherto, been conducted by the Finance and House Committee under the Chairmanship of Mr. G. Fox-Wilson, and the Publication and Library Committee under the Chairmanship of Dr. W. J. Hall, for whose help the Society is very grateful.

The Committee on Generic Nomenclature has not met, but it is hoped shortly to resume work on the papers in hand.

During the year the Council has received the report of the sub-committee set up to consider the publication of a series of handbooks on British Insects. Much preliminary work has been done on this project, but it has become obvious that the cost would be more than the Society could meet from its own resources alone. There is good reason to hope that financial assistance will be forthcoming, and as soon as the position is clarified the project will proceed without delay.

The Council, and particularly the Committee for the Protection of British Insects, have been much disturbed by the proposed extensive requisitioning of areas of biological interest. The Society has associated itself with protests in the case of certain of these areas, and it is hoped that biological interests will not suffer unduly when final decisions are taken. The Protection Committee are pleased to report that they were able to take active steps towards the preservation of *Acidalia immorata* in Sussex and *Melitaea cinxia* in the Isle of Wight. On behalf of the Committee Mr. G. M. Spooner paid a visit to the locality in Cornwall where *Maculinea arion* is protected. Although the survey was disappointing, there is every reason to believe that this species is in no real danger of extinction, as ample natural sanctuary still remains. The Committee will continue to watch the position.

The Society has become a member-Society of the Biological Council, the object of which is to foster closer liaison between scientific societies; and has been represented at several meetings which were called to consider a proposal to create an Institute of Biology which would be concerned with the professional interests of biologists.

A card index of Fellows' addresses arranged on a geographical basis is now available for the use of Fellows in the Society's rooms, as notified in *Proceedings Series C*.

The use of the Library has increased greatly during the year, the number of books borrowed being 1167 (705),¹ the number of Fellows borrowing books being 681 (397). 85 (11) books were also lent to the National Central Library during the year. The most notable accession was Mr. H. E. Andrewes' handsome gift of his library of works on Coleoptera.

The preparation of a new catalogue of the library has been much in mind, and it is intended to start work on this project as soon as circumstances permit.

The Society's premises are still used as the Publication Office of the International Commission on Zoological Nomenclature and as the offices of the Society for the Bibliography of Natural History.

The Eltringham Microscope is still on loan to Mr. W. S. Richards for research work being carried out at Rothamsted Experimental Station, under the usual conditions.

The *Transactions* for 1946 were published in two volumes, of which Volume 96 comprised the papers unavoidably held over from 1945. It consisted of 10 parts, the last being published on 20th June. Of the 10 papers, 3 deal with Lepidoptera, 2 with Homoptera, and 1 each with Hemiptera, Hymenoptera,

¹ The numbers in brackets throughout the Report indicate the corresponding figures for the previous year.

Odonata, Coleoptera and Diptera. This volume consisted of 186 pages and 9 plates.

Volume 97 comprised 20 parts, the last part being published on 23rd December. Of the 20 papers, 5 deal with Lepidoptera, 4 with Homoptera, 3 with Coleoptera, 3 with Diptera, 2 with Odonata, and 1 each with Hemiptera, Trichoptera and General Entomology. The volume consisted of 592 pages and 2 plates.

The *Proceedings* were continued in three series, as follows :

Series A (General Entomology). Volume 21 consists of 108 pages and contains 22 papers.

Series B (Taxonomic Entomology). Volume 15 consists of 159 pages and contains 37 papers.

Series C (Journal of Meetings). A part of *Series C* was sent to each Fellow in advance of meetings and a complete copy of the volume will be distributed with the last part.

During the year the death of 1 Special Life Fellow—F. W. Frohawk—and 8(9) Ordinary Fellows has been reported : E. O. Armytage, B. H. Cooke, D. M. N. Davidson, G. F. Gee, O. Piel, C. F. Selous, B. H. Smith and F. H. Taylor.

The following 12 (3) Fellows have resigned : E. Bolton-King, D. R. Buxton, J. E. Cope, W. H. Edwards, Mrs. G. R. Hearnshaw, F. R. P. Lemmon, G. A. Letts, J. Marshall, J. H. Murgatroyd, J. A. Sinton, W. Hawker Smith, and J. J. Ward.

The following 4 (7) have been removed from the list of Fellows in accordance with the Bye-Laws, Chapter XVI, Section 3 : R. P. Bengry, A. E. Halfpenny, Maxwell Knight, and A. K. Powell.

During the year 1 Honorary Fellow—Dr. A. da Costa Lima—and 103 Ordinary Fellows have been elected, of whom 93 have completed their obligation. In addition, 11 Fellows elected in 1945 completed their obligation in 1946. This has meant a large increase in the number of Fellows. The Society now consists of 5 Honorary Fellows, 11 Special Life Fellows and 786 Ordinary Fellows, a total of 802—by far the highest membership ever recorded.

While the Council is pleased to be able to report a gradual return to pre-war activities, and to say that it is hoping to extend the facilities available to Fellows, no undue optimism is permissible in these difficult times, as will readily be judged by the Treasurer's remarks. Every care will need to be taken still to exercise the strictest economy in the affairs of the Society.

Treasurer's Report.

Mr. A. Welti said :—

It is my privilege to present to you, Mr. President and Fellows, my fifth annual report, and I place the accounts of the Society on the table for your inspection and approval. They have been audited once more by Messrs. W. B. Keen & Co., who have audited our accounts for so many years. The accounts this year again show a small credit balance of £101 14s. 11d., and in this we are fortunate. The times are, however, not for complacency. Let us realise that such a happy result is due to good fortune.

When reporting last year, the war had terminated, and everyone hoped for an early return to a better state of affairs. This improvement, as we all now know, is yet to come, and at the moment in industry, commerce and finance

everyone is battling with many difficulties. It may be true to say that our favourable financial position and the balance of our accounts are due to one cause : the good sales of our publications during the last year. Whilst the war was on, interested parties were unable to obtain our publications, and during the past twelve months we have benefited from this state of affairs. It is not of a recurrent nature, and we should not be under any illusion on this point.

Owing to the gratifying increase in the number of our Fellows, our Income from Subscriptions has risen, but this increase in income means increased liabilities. Each new Fellow receives our publications, and the cost of these exceeds the annual subscription. Again, if we compare our Income from Subscriptions with our actual outgoings for House and Office expenses over the last two years, we find

1945 Subscriptions	£1405.	Expenses	£1517.
1946	„	£1637.	„
			£1831.

which means a deficit of about £100-£200 annually. And these figures make no allowance whatever for the fact that we are occupying these large premises without paying rent. This means that our accounts make no reserve for amortisation.

There are other factors that should be mentioned. Our Government, in the national welfare, is making a determined effort to lower the rate of interests on Gilt-edged Stocks. This has affected us, and to date £3000 of our old investments have been recalled and repaid. Re-investment at a lower rate of interest would mean less income. As an illustration : the Hamilton Druce Fund, originally created to benefit our Library Fund, now produces an income of £32 10s. instead of £40 as previously. Your Finance Committee earmarked our next best investment to this Fund, otherwise the income would have been only £25. In an endeavour to escape this reduction in income, your Finance Committee recommended, and your Council agreed, to invest the proceeds of the first of these repayments in Industrial Shares, which has been beneficial so far.

Our Capital Investments have remained intact, except for these enforced repayments, which have been and are being re-invested. During the year it has not been necessary to draw upon our first reserve, which is the £2000 deposited in the Post Office Savings Bank. To the detriment of such Societies as ours, our Government has restricted deposits in this bank to £2000, and this deprives us of the opportunity of using the Post Office Savings Bank as a temporary refuge for a short-term investment.

Throughout the year a reasonable Credit Balance has been maintained with our Bankers ; at no time has there been an overdraft, nor have we ever had any outstanding accounts. Every account has been paid immediately it has been rendered to us.

By a generous gesture the War Damage Repairs Licensing Authorities granted us a licence to repair the most necessary and urgent war damage to our buildings. This will enable us to preserve the structure and render it water- and weather-proof. Whilst it has been the constant aim to make provision in our accounts for repairs and redecoration, we shall one day be faced with heavy expenditure on this account. It is for purposes such as this that our Society should seek to maintain an adequate Capital Reserve.

My esteemed predecessor laid down a rule, that all money derived from Admission Fees should represent a new Fellow's contribution to all the past

work of this Society and be some little safeguard for its future. Therefore, the total sum derived from Admission Fees is this year again being placed to Capital Reserve.

In 1946 we have been most fortunate in receiving handsome donations towards our publications, and sincere gratitude should be felt towards the donors. They benefit us in more ways than one. Through their assistance we can publish works which we otherwise could not do. By this means we are able to achieve the real object of this Society—the improvement and diffusion of entomological science. We are also able to distribute copies of these works throughout the world, thereby not only maintaining our proud position, but giving proof of our vitality.

The income we derive from interests on our Investments has helped towards the maintenance of our Library. New acquisitions in books have cost us £124, whilst we have spent £142 on binding, etc. The new Library Catalogue is constantly in mind, and we must be thankful to our Fellow, Professor Cockerell, for a gift of £200, which has been added to the sum already set aside for the catalogue.

Under the heading of Expenditure, we have our General Office and House Expenses, which include repairs to the building; the upkeep of the Library; the cost of our publications. Lastly, there are the donations we make to other learned Societies with a view to retaining their goodwill and securing their reports and publications. We have had more calls on us for donations during this year than ever before. For the first time in my recollection, the Finance Committee has on sundry occasions had to advise the Council that we must refrain from contributing. Nevertheless, we have made donations to the extent of £72, as compared with £57 in 1945 and £25 in 1941.

The cost of our publications less donations in 1946 was £1496, as compared with £1269 in 1945. As you have heard, we have been forced to change our printers, and it is certain that in 1947 the costs of our publications will be very considerably higher.

General Office and House Expenses have been contained within reasonable limits at £1831, as compared with £1517 last year.

All these matters have been gone into fully, and if you will study the Accounts, you will find everything recorded in great detail. We must now take courage and face the future with its burdens. May I recall to your minds, what I said in regard to the year 1944 :—

“The general tendency is for our expenditure to increase, the costs of our publications have again advanced and there is no relief in sight. There is no possibility of our adding to our sources of income in a similar ratio.”

Last year I had to supplement this and I told you :—

“The simple truth is that, like so many other institutions, one day we too may be forced by the stress of the times to call upon our Fellows for an increase in their annual subscriptions.”

Unwilling as I have been and am to take this step, it has now become my duty to do so. You will all agree that the whole fabric of this Society is dependent upon a sound financial basis. The pride we feel in being Fellows of this Society must be equal to the strain of bringing some personal sacrifice to maintain the edifice. There seems to be no escape, and your Finance Committee will be asked to consider the question and to make a recommendation

to your Council early this year for a revision of the annual subscriptions. Should they agree and decide that such a policy has become imperative, it is hoped that Fellows will realise that this is due to forces over which we have no control, and that in common effort and loyalty each should do his best to shoulder his share of such an additional burden.

Before closing this Report, there is one small change in the form of the Accounts to which attention should be drawn. It has been deemed advisable to abolish the Staff Provident Fund as a separate account. The funds have been transferred to the Capital Reserve Fund and earmarked there for "Staff Provident purposes." This is really merely a simplification of our Accounts.

I should like to express my thanks to our President, the Finance Committee and its Chairman, Mr. Fox-Wilson, and all our permanent Staff for all their help and assistance, which has been so willingly given during the whole of the year.

STATEMENT OF INCOME AND EXPENDITURE for the Year ended 31 December, 1946.

(Presented at the Annual Meeting, 15 January, 1947.)

53

GENERAL FUND.

INCOME.

1945. £	1945. £	INCOME.		EXPENDITURE.	
		£	s. d.	£	s. d.
45		To subscriptions—		By house expenses—	
1,259		received in advance for 1946...	55 12 0	wages ...	302 5 2
1,102		received in 1946 for 1946 ...	1,455 7 1	fuel, gas and electric light ...	114 14 6
1,406		received in 1946 for previous years ...	125 14 0	insurance ...	17 3 11
				water ...	22 8 4
60		Less subscriptions in arrear at 31	1,636 13 1	repairs fund—transfer ...	400 0 0
		December, 1945—valued at ...	70 0 0	A.R.P. expenditure ...	— 7 8
1,346				miscellaneous ...	27
					883 19 7
70		add subscriptions in arrear at 31	1,566 13 1		
1,416		December, 1946—valued at ...	50 0 0		
253		transfer from Capital Reserve Fund—	1,616 13 1	office—	
		dividends and interest (gross) ...	302 19 9	salaries ...	1,033 3 7
1,622		publications—		printing and stationery ...	114 6 3
		sales ...	2,317 1 10	postage and telephone ...	90 11 7
290		transfer from Library Fund—value of		audit fee ...	31 10 0
1,912		exchanges ...	475 0 0	superannuation ...	41 19 10
43				miscellaneous ...	35 0 8
		interest—Post Office Savings Bank ...	2,792 1 10		1,346 11 11
274		sub-tenants—	49 12 5	library fund—	
250		rent ...		transfer... ..	266 1 4
524		contributions towards house expenses	283 0 0	do. towards book purchases and	
1		miscellaneous receipts ...	564 13 5	binding ...	200 0 0
		donation ...	1 0 0	do. towards library catalogue ...	475 0 0
			200 0 0	value of exchanges ...	— 0 0
				publications—	1,985 18 1
				less donations ...	240 0 0
				Westwood bequest ...	14 7 4
				Wilkinson bequest ...	—
					254 7 4
				transfer to Special Publications Fund	1,731 10 9
				towards library catalogue ...	400 0 0
					2,131 10 9
				donations—	
				Zoological Record ...	25 0 0
				International Commission on Zoologi-	
				cal Nomenclature ...	25 0 0
				Yorkshire Naturalists' Trust ...	10 0 0
				Wickens Fen Fund ...	5 0 0
				Biological Council ...	5 0 0
				Royal Sanitary Institute ...	2 2 0
				Committee for the Protection of	
				British Insects ...	—
				transfer to Staff Provident Fund	72 2 0
				Staff Provident Fund for	—
				excess of income over expenditure	50 0 0
				carried to Balance Sheet ...	101 14 11
					£5,527 0 6
					£4,149
					£5,527 0 6

STATEMENT OF INCOME AND EXPENDITURE for the Year ended 31 December, 1946.

LIBRARY FUND.		EXPENDITURE.	
1945.	1945.		
£	£	£	s. d.
44	115	By new books	123 14 1
	115	" binding, repairs and insurance	142 7 3
230	230	" transfer to sales of publications—value of	266 1 4
100	290	do. exchanges	475 0 0
200	344	do. towards library catalogue	238 3 3
290		do. do. value of exchanges	
820	941	Balance Sheet	
£864	£864		£979 4 7

REPAIRS TO PREMISES FUND.		EXPENDITURE.	
1945.	1945.		
£	£	£	s. d.
350	350	By repairs	24 15 0
£350	£350	" excess of income over expenditure carried to Balance Sheet	975 5 0
			£400 0 0

SPECIAL PUBLICATIONS FUND.		EXPENDITURE.	
1945.	1945.		
£	£	£	s. d.
13	13	By excess of income over expenditure carried to Balance Sheet	417 9 4
£13	£13		£417 9 4

BALANCE SHEET, 31 December, 1946.

GENERAL FUND.

LIABILITIES.	£ s. d.		£ s. d.		ASSETS.	
	£	s. d.	£	s. d.	£	s. d.
To Sundry creditors	884	14 1	By sundry debtors—	...
„ subscriptions in advance	91	18 1	subscriptions valued at	50 0 0
„ Westwood bequest—	7	3 8	rent and contributions to house expenses	157 16 3
as at 31 December, 1945	7	3 8	publications valued at	1,200 0 0
add interest on investment during year	14	7 4	sundries	6 3 10
less amount applied towards cost of illustrations	14	7 4		1,414 0 1
cash at bank—	294	4 4		
Current Account overdrawn	102	19 1		
less Petty Cash Account	8	9 11		
cash in hand	111	9 0		
excess of assets over liabilities—	182	15 4		
as at 31 December, 1945	152	17 8		
add excess of income over expenditure for year to date	101	14 11		
	254	12 7		
			£1,414	0 1		

	£	s. d.	£	s. d.
Reconciliation of cash balances—				
Post Office Savings Bank—				
Library Fund ...	...	136 4 0		
Repairs to Premises Fund	...	354 19 1		
Special Publication Fund	...	1,336 15 6		
Capital Reserve Fund	...	154 14 4		
Hamilton Druce Bequest Fund	...	66 19 6		
		£2,049 12 5		
Current Account—				
Library Fund	...	500 0 0		
Repairs to Premises Fund	...	707 7 9		
less General Fund overdrawn	...	1,207 7 9		
		294 4 4		
		£913 3 5		
Petty Cash, Bank Account—				
General Fund	...	£102 19 1		
Cash in hand—				
General Fund	...	£8 9 11		

LIBRARY FUND.

LIABILITIES.		£	s.	d.	£	s.	d.	ASSETS.	
To sundry creditors	10	7	9	...	By library furniture and fittings	...
" excess of assets over liabilities—	library books (valued at £10,000)	...
as at 31 December, 1945	1,087	13	0	...	" in amount at cost	...
less transfer to Special Publications Fund of amount	" £200 3% Savings Bonds 1955/55	200 0 0
allocated for library catalogue	500	0	0	...	(market value at date £217 0s. 0d.)	...
	" cash at bank	136 4 0
add excess of income over expenditure for year to	587	13	0	...	Post Office Savings Bank	...
date	238	3	3	...	Current Account	500 0 0
	825 16 3	...		636 4 0
	£836 4 0	...		£836 4 0

REPAIRS TO PREMISES FUND.

LIABILITIES.		£	s.	d.	£	s.	d.	ASSETS.	
To excess of assets over liabilities—	1,117	14	8	...	By investment at cost—	...
as at 31 December, 1945	£450 3% Local Loans	430 12 10
add excess of income over expenditure for year to	375	5	0	...	(market value at date £450 0s. 0d.)	...
date	1,492 19 8	...	" cash at bank	354 19 1
	£1,492 19 8	...	Post Office Savings Bank	707 7 9
	£1,492 19 8	...	Current Account	1,062 6 10
	£1,492 19 8	...		£1,492 19 8

SPECIAL PUBLICATIONS FUND.

LIABILITIES.		£	s.	d.	£	s.	d.	ASSETS.	
To excess of assets over liabilities—	665	4	4	...	By investment at cost—	...
as at 31 December, 1945	£250 3% Local Loans	239 4 10
add transfer from Library Fund of amount allocated	500	0	0	...	(market value at date £250 0s. 0d.)	...
for library catalogue	" sundry debtors for publications	6 13 4
excess of income over expenditure for year to	417	9	4	...	" cash at bank	1,336 15 6
date	1,582 13 8	...	Post Office Savings Bank	...
(Included in the above is a sum of £900 allocated for the	£1,582 13 8	...		£1,582 13 8
library catalogue.)	£1,582 13 8	...		£1,582 13 8

CAPITAL RESERVE FUND.

LIABILITIES.		ASSETS.	
£	s. d.	£	s. d.
To excess of assets over liabilities—		By freehold premises, 41, Queen's Gate, S.W. (cost including alterations, £13,417)	
as at 31 December, 1945	6,333 12 3	investments—	...
add premium on redemption of 3% National Defence Bonds ...	10 0 0	at value 6 March, 1934—	...
profit on transfer of Mersey Docks and Harbour Board Debenture Stock to Hamilton Druce Bequest Fund at market value ...	111 16 0	£532 3s. 5d. 4% Consols	591 7 6
admission fees received during year ...	318 3 0	at cost—	...
Interest on investments ...	302 19 9	£1,094 10s. 0d. 3%, Conversion Loan, 1918-53	1,152 2 3
		£1,079 5s. 5d. 3%, Funding Stock, 1959-69	1,001 2 6
		£1,500 0s. 0d. 3%, Redemption Stock, 1986-96	1,331 0 3
		£600 0s. 0d. 3%, War Stock	609 2 0
		£1,000 0s. 0d. 3%, War Stock, 1955-59	1,005 15 6
		£300 0s. 0d. 3%, Local Loans	287 1 10
Less transfer to General Fund Income and Expenditure Account ...	7,076 11 0	£200 0s. 0d. Imperial Chemical Industries, Ltd., Ordinary Stock	417 3 6
	302 19 9	180 Pinchin Johnson & Co., Ltd., Ordinary Shares	347 18 6
„ amount allocated for Staff Provident purposes—		£50 J. Lyons & Co., Ltd., Ordinary Stock ...	334 6 0
transfer from Staff Provident Fund—		(market value at date, £8,003 0s. 0d.)	7,076 19 10
excess of assets over liabilities at 31 December, 1945 ...	408 2 11	„ cash at bank—	...
add transfer from General Fund ...	50 0 0	Post Office Savings Bank	154 14 4
		„	...
	458 2 11		...
	<u>£7,231 14 2</u>		<u>£7,231 14 2</u>

TRUST FUNDS.

LIABILITIES.		ASSETS.	
£	s. d.	£	s. d.
To Hamilton Druce Bequest—		By Hamilton Druce Bequest—	
as at 31 December, 1945	1,000 0 0	investments—	...
add profit on redemption of 4% New Zealand Stock	95 15 6	£402 2s. 2d. Mersey Docks and Harbour Board 3½% Debenture Stock, 1970-80 at cost	418 11 6
	1,095 15 6	£593 17s. 10d. ditto transferred from Capital Reserve Fund at market value ...	610 4 6
Westwood Bequest—		(market value at date, £1,115 0s. 0d.)	1,028 16 0
as at 31 December, 1945	250 0 0	„ cash at bank—	...
		Post Office Savings Bank	66 19 6
		Westwood Bequest—	1,095 15 6
		investment at cost—	...
		£239 12s. 4d. Birmingham Corporation 3% Stock, 1947	250 0 0
		(market value at date, £243 0s. 0d.)	...
	<u>£1,345 15 6</u>		<u>£1,345 15 6</u>

(Signed) A. WELT, *Hon. Treasurer.*

We have audited the above Balance Sheets and Accounts with the Books and Vouchers of the Society and certify them to be correct. The Solicitors have certified to us that they held the Deeds of No. 41, Queen's Gate for safe custody on behalf of the Society and we have verified the Investments and Bank Balances.

(Signed) W. B. KEEN & Co., *Chartered Accountants.*

*Finsbury Circus House,
Blomfield Street,
London, E.C. 2.
13 January, 1947.*

COMMITTEE FOR THE PROTECTION OF BRITISH INSECTS.

RECEIPTS AND PAYMENTS ACCOUNT for the Year ended 31 December, 1946.

	RECEIPTS.		PAYMENTS.	
To balance 1 January, 1946	£ s. d., 8 7 4	By expenditure on preservation of <i>L. dispar</i> and <i>Acidalia immorata</i> ...	£ s. d., 7 0 0	
" donations ....	... ... ... <hr/>£14 11 4	" balance at Bank, 31 December, 1946 ...	... ... ... <hr/>£14 11 4	

(Signed) H. M. EDELSTEN, Hon. Treasurer.

We have audited the above Account of Receipts and Payments and certify it to be correct.

*Finsbury Circus House,
Blonfield Street,
London, E.C. 2.
25th January, 1947.*

(Signed) W. B. KEEN & Co., Chartered Accountants.

WICKEN FEN FUND.

RECEIPTS AND PAYMENTS ACCOUNT for the Year ended 31 December, 1946.

RECEIPTS.		PAYMENTS.	
	£ s. d.		£ s. d.
To balance at Bank, 1 January, 1946	... ..	By printing, stationery and postage ...	... ..
" donations	... ..	" donation to the National Trust ...	... ..
" "	... ..	" balance at Bank, 31 December, 1946	... ..
	<hr/>		<hr/>
	£77 4 6		£77 4 6

(Signed) H. M. EDELSTEN, Hon. Treasurer.

We have audited the above Account of Receipts and Payments and certify it to be correct.

*Finsbury Circus House,
Blomfield Street,
London, E.C. 2.
25th January, 1947.*

(Signed) W. B. KEEN & Co., Chartered Accountants.

THE PRESIDENT'S ADDRESS

LADIES AND GENTLEMEN,

The Council's report on the past year has been put before you, and I do not wish to take up time in saying anything about it in view of the address which I shall give, and will occupy your attention for quite long enough. It is, however, my sad duty to enumerate the losses which the Society has sustained by deaths during the year, or which have only come to notice during the year.

The Society is the poorer by the loss of one Special Life Fellow, 8 ordinary Fellows, and 4 entomologists who had been Fellows of the Society in former years, and I ask you to stand for a moment while I read their names.

Frederick William FROHAWK, who was elected to a special life fellowship in 1926, had been a Fellow since 1891. He was the son of a country squire and was born in Norfolk on 16th July, 1861. Educated at private schools, his natural talents soon made him known as a most gifted artist, and from an early age he began illustrating, first, in 1881, the *Field*, and afterwards ornithological works. He illustrated in 1896 *British Birds, their Nests and Eggs*, and in 1905 provided twenty-four coloured plates for *The Geese of Europe and Asia*. He wrote, and illustrated, for the British Museum, the handbook *Birds Beneficial to Agriculture* in 1919. His earliest entomological paper—a note in the *Entomologist* in 1884 on the sleeping position of *Thanaos tages*—showed that his inclination was toward natural history rather than to taxonomy, and later years abundantly revealed him as that enviable combination, the artist-naturalist. He contributed many notes to journals, but it is here proposed to note only his outstanding accomplishment, the complete elucidation of the life-history of *Maculinea arion* (L.). In 1899 he recorded the oviposition upon flower-heads of wild thyme, seen by Mr. A. B. Farn, and watched development of the larvae upon the flowers. After the third moult “the larvae persistently refuse to remain on the blossoms or any other part of the plant and appear to have a tendency to hide in the ground.” In 1903 he wrote that from observations on the oviposition he felt convinced that some connection existed between *arion* larvae and the common yellow ant (*Formica flava*). He found two larvae rolling about together under the thyme blossom, one of which was feeding upon the other. Having proved the carnivorous habit, he found that after the third moult they do not attack each other, nor would they eat ants' pupae. A live larva placed in a box with ants at once evoked striking behaviour, the ants running over it and licking away beads of fluid which appeared on the back and were subsequently found to emanate from a gland. The touch of an ant's foot on this gland caused it to swell up and eject a droplet. This reaction appeared to be highly specialised, for touching the gland with a fine brush produced no response. Frohawk managed to induce the third-stage larva to feed on another plant and to reach in the fourth stage a length of a quarter of an inch. In 1905, with A. L. Rayward, he found a living pupa in Cornwall and the pupa-case of a freshly-emerged female which was at rest close by: this “paved the way to success.” In July 1906, after prolonged search, a full-grown *arion* larva was found in an ants' nest, with three more, of smaller size; but no more could be found in very many nests. The larva was then described, and Frohawk wrote that there was but little doubt that food is tendered by *Lasius flavus*. The final chapter was written in 1915, with the aid of Captain Purefoy, who reported having seen a *Myrmica laevinodis* “who had milked the larva

several times, suddenly seize it bodily and rush off with it." Frohawk and his friends experimented by putting down near a *laevinodis* colony four *arion* larvae which had just passed through their third and last moult, ready for entering their new and remarkable mode of life. In all four cases "the individual ant which first finds the larva is always the one to seize and carry it off." The *arion* larva hunches itself up in a peculiar manner (graphically illustrated by Frohawk) before being carried off, possibly the result of a signal given to it by the ant. The previous failure to find larvae of *arion* in the nests of *Formica flava* was attributed by Frohawk to the probability that that little ant is incapable of carrying off such a bulky burden.

The earlier work of illustrating ornithology was replaced in later years by his unsurpassed *Natural History of British Butterflies*, published by subscription in 1924 under the aegis of Lord Rothschild, who wrote in the preface that it is the only work in any language that contains a complete account of the life-history of all the sixty-eight British butterflies. The complete *Book of British Butterflies*, lavishly illustrated, was published in 1934 on more popular lines, and was followed in 1938 by *Varieties of British Butterflies*, illustrated by forty-eight coloured plates. This was his last great work, for his sight gradually failed. In virtue of his distinguished work for natural history, Frohawk was awarded a civil list pension in 1932: he died on 10th December.

Edward Oscar ARMYTAGE was elected in 1913.

Brigadier-General Bertram Hewett Hunter COOKE, elected in 1924, who died suddenly on 20th September at the age of 72, had a distinguished military record, and saw his first active service in the Nile expedition of 1898. He fought, and was wounded, in the South African War, and also fought in the First World War, in which he received many honours. His entomological interests lay in butterflies, and he made a large collection of South European species, which, beautifully arranged and furnished with precise data, he bequeathed to Oxford University. His last published note was on the occurrence of *Rhyacia simulans* at Windsor. In 1943 he separated the Scottish race of *Erebia epiphron* Knoch, under the name of subsp. *scotica*.

D. M. N. DAVIDSON, elected in 1939, reported "missing" on active service. James DAVIDSON, who died on 13th August, 1945, at the age of 60. Born in Cheshire, he took the B.Sc., Liverpool, and was awarded the D.Sc. in 1915. His earliest studies were on the biology and feeding mechanisms of aphides, and he co-operated with L. E. Robinson in a beautifully illustrated work, *The Anatomy of Argas persicus*. In 1914, having enlisted, he was transferred to special entomological duties, and in Sinai made notable contributions to the control of fly-carried dysentery. He was appointed chief entomologist at Rothamsted in 1919, where he continued the study of aphides and their alternations of host-plants: a monographic *List of British Aphides* was published in 1925. Studies of the influence of chemicals added to solutions in which bean plants were grown as food for aphides led to pioneer work on "trace elements" in plant physiology. In 1928 he was appointed to take charge of the entomological department of the new Waite Agricultural Research Institute at Adelaide, and studied the effect of physical environment on *Smynturus viridis*, which led to a prolonged consideration of the climatology of Australia, and statistical work on the relation between temperature and rate of development. He was a prominent Fellow of the Royal Society of South Australia from 1929 onwards, and presided over it in 1937-38. He held the only chair of entomology in Australia, the Waite professorship, since 1935, and was a Fellow of our Society from 1913 to 1932. Further information on his work will be found in 1945,

Trans. R. Soc. S. Australia 69 : 313-7, from which these notes have been taken.

Arthur H. FOSTER was a Fellow from 1913 to 1938. He was one of the old type of naturalist and antiquarian with a very wide general knowledge, and contributed notes on mammals, birds and Lepidoptera to the Hertfordshire Natural History Society : he was recorder for Lepidoptera for that society for nearly thirty years.

George Frederick GEE, who died on 23rd June, 1945, at the age of 72, was elected Fellow in 1923. He was an accomplished field naturalist. His early preferences for Lepidoptera were later supplemented, and to some extent superseded, by interest in birds. He contributed notes on local fauna to the Lancashire and Cheshire Entomological Society, and was also a devoted horticulturist and skilful taxidermist.

George Vernon HUDSON, who died on 5th April, 1946, was born in London in 1867, the son of an artist who taught him to paint insects, so that at the age of 12 he wrote and illustrated a small book. Two years later he went to New Zealand and entered the postal department at Wellington, retiring in 1919. He was a man of great activity, with many interests, and his large output of work was made possible only by enthusiasm and adherence to routine. An assiduous collector, especially of the Coleoptera for which New Zealand is so remarkable, he was able after retirement to devote more time to preparing life-histories. The day before his death he was happily collecting with his grandson, and he died in an armchair with South's *British Moths* open on his knees. His magnificent collection of New Zealand insects was bequeathed to the Dominion Museum at Wellington. For many years he had sent beetles to his old friend J. J. Walker, and on the death of the latter continued to enrich the collections which had passed to Oxford. Thus the Hope Department possesses an unusually fine collection of New Zealand beetles. Hudson, however, was more than a Coleopterist. He wrote half a dozen books on New Zealand insects, of which the *Elementary Manual of New Zealand Entomology*, published in 1892, became very well known. *The Butterflies and Moths of New Zealand* contained sixty-two plates showing every species in colours; a supplement in 1940 added over 200 species. Hudson was also a capable astronomer, and on 9th June, 1918, discovered the star Nova Aquilae, which attracted much attention. He was one of the original Fellows of the New Zealand Institute, which awarded him its highest honour in 1928. He was a Fellow of our Society from 1913 to 1932.

Rev. Father O. PIEL was born in 1876, and became a Jesuit at the age of 18. In 1910 he was sent to China. After sixteen years work as missionary and, later, professor at Zikawei, he returned to France to recuperate health, and was able to study entomology at museums in Paris and London. Before returning to Shanghai he also visited museums in the United States and Japan. He succeeded Savio as director of the Musée Heude in 1935, and for his studies on Hymenoptera received the Passet prize from the French Entomological Society. He died on 5th July, 1945, and had been a Fellow of our Society since 1928.

Cuthbert Fennessy SELOUS was elected a Fellow in 1911. He was one of the many medical practitioners who find relaxation in entomology : his special interests were in medicine, pathology, and in entomology, Coleoptera. He published notes in 1910 and 1911 on some of the rarer species at Barton-on-Sea, and on the "so-called carrion-feeding Coleoptera," of which the larger species were seen to devour dipterous larvae rather than carrion.

B. H. SMITH died on 19th April, 1946, aged 72. He had been a Fellow of our Society since 1911, and had been a collector of butterflies since boyhood.

F. H. TAYLOR was elected a Fellow in 1936. He died in New South Wales on 20th December, 1945, at the age of 59. Having been educated at Sydney Grammar School, he eventually took up medical entomology, and was the first entomologist at the Australian Institute of Tropical Medicine, Townsville, his connection with it being temporarily severed in 1918 while he acted as entomologist to the special Blowfly Committee in Queensland. Transferred to Sydney in 1930, Taylor lectured at the School of Tropical Medicine, and carried out surveys of Diptera in New Guinea and Northern Australia. The mosquito-carrier of Dengue fever was traced from Darwin along the air route as far as Cootamunda. He collaborated in the production of service publications on Dengue fever, and the mosquito-carriers of malaria and other diseases in Australia, New Guinea, and Netherlands East Indies. A book on harmful Arthropoda of Australia and New Guinea is shortly to be published. Taylor formed the type collection of the school of Tropical Medicine, and had almost completed a monograph on TABANIDAE. A member of the Linnean Society of New South Wales, he presided over it in 1938; he was also a member of the British Ecological Society.

Rowland Edwards TURNER, who died on 29th November, 1945, in South Africa, at the age of 82, was a Hymenopterist of great experience, and had been a voluntary worker at the British Museum (Natural History) for over thirty years, greatly enriching it with massive collections of his own, numbering over 850,000 specimens. He was the world's authority on THYNNIDAE and discovered a new family, DINAPSIDAE, in South Africa.

Before I pass on to the Address, I feel sure the Society would like to record its appreciation of the award of C.M.G. conferred as a New Year Honour by His Majesty the King upon our former President, Professor P. A. Buxton, F.R.S.; and on your behalf I would offer our sincere congratulations to him.

SOME REMARKS ON MIMICRY, WITH ESPECIAL REFERENCE TO THE AFRICAN NYMPHALINE BUTTERFLY *PSEUDACRAEA* *EURYTUS* L.

Mimicry is no longer the subject of hotly contested debates in this Society, and indeed there has been no real discussion of it, as a whole, for many years. May one hope that this is because it is generally taken for granted? If so, there is danger lest it should be too much taken for granted, and I therefore feel that, more especially for the younger members in whose ears the echoes of far-off battles have not sounded, it will be well to spend a little while on some thoughts which may be helpful.

I trust that the old idea of killing the subject by ridicule is now defunct. Among the archives of the Hope Department at Oxford I found a letter from the zoologist J. E. Gray to J. O. Westwood, discussing mimicry from this very point of view. I may say that Gray, who handled a good many animals, does not seem to have been, in any sense, an entomologist. "My dear Westwood, thanks for your letter in the *Athenaeum* [1866, Dec. 8, p. 753]. I think you have given the Mimicry its death-blow. I have always ridiculed it but you have given very strong arguments against it. I never heard such a foolish theory, and so weakly supported. Ever yours sincerely, J. E. Gray. 7 Dec. 1866." In spite of ridicule, the theory of mimicry is far from being dead!

It is unfortunate that for ordinary usage one must employ a name which has a very definite connotation and has proved to be a stumbling-block, from its very obviousness, to many critics and even to some, not opposed to it, who have not completely grasped the basic principles. It is disconcerting to find, in a recent little book on coloration (1), the following passage: "Supposing for a moment that insects are aware of tone, colour and pattern of inanimate objects in their immediate world, or of leaves and flowers which sway in the wind: why should they not also cognise the conspicuous, rapidly moving life which is equally a part of their environment? It is quite suitable for an insect of slow habits, living amongst lichen, to take on the appearance of lichen. . . . But amongst insects of active habits, what more suitable than to resemble some quickly moving, conspicuous model in the same environment . . .?" This idea of consciousness *will* creep in, and confuse the issue. But the only substitutes—the terms Pseudoposematic for Batesian mimicry and Synaposematic for Müllerian resemblance—seem to be too cumbersome for ordinary use, so that the term mimicry cannot be dropped. But it must be kept for Batesian mimicry, and not, as formerly, used for cryptic resemblances to leaves, stones, etc. The only good in such usage is that it does emphasise the fact that Batesian mimicry and special procrypsis are different aspects of the same thing. This point is one on which critics often show their narrowness of outlook, by putting mimicry on a little pinnacle of its own as something peculiar and isolated. In reality one can form a complete chain of examples from general crypsis to the most perfect pseudoposematic resemblance, in which it cannot be claimed that one link is quite different from the rest. Consider the following cases—an earth-coloured grasshopper—a bark-like moth—a stick-like Phasmid—a moth resembling a bird-dropping—a spider resembling the empty head capsule of a dead ant, and a spider mimicking a living ant. I think that difficulties are introduced by too much "pigeon-holing." Thus:—

A. A species is a mimic or it is not. Therefore, how can an initial slight resemblance have any value?

B. A species is either "nice" or "nasty." Therefore, what becomes of the claim that ants, which are devoured wholesale by specially modified vertebrates, are protected, and thus form models for mimicry?

C. An enemy is either hungry or not hungry.

D. A prey is either conspicuous or concealed.

Looking at these four statements, one is struck by the contrariness of things. Critics have often spoken as if mimicry were the product of "arm-chair enthusiasts," and yet these four statements obviously emanate from an "arm-chair" mind, while support for the theory comes, as it always has done, from naturalists who have actually been deceived by it.

Let us consider these four points a little more: first, an insect is a mimic or it is not. Above all things mimicry is an affair of *life*, and not merely of cabinet specimens. Critics discuss at length the details of the appearance of a supposed mimic, and prove to their own satisfaction that *A* cannot be a mimic of *A* because a yellow spot is not of the same shape, and occupies a different position on the body, or wing. That may be all very well in the cabinet, but not in life. The enemy is seeking food amidst many distractions, with multiplicity of insects and other food to choose from, and if he hesitates either someone else will get the prey or it may escape while he makes up his mind. It is highly significant that mimicry is best exemplified where, and when, insect life is most abundant. Thus a mere trick of flight or gait, a change in the angle of

incidence of the light, an imperfect glimpse of the insect among surrounding, and intervening, objects may cause hesitation, and he who hesitates is lost. How often must many of you to whom I am speaking have "thought it was something else," and subsequently been amazed that you could have thought so! A very experienced student of British butterflies told me that every year, when the first *Pararge megera* appeared, he was liable to be deceived by its appearance, to be disillusioned after capture! The interesting article by G. S. Carter (2) applying Russell's conception of "valent characters" to mimetic resemblances is much to the point. He says, "Characters that are competent to initiate action are called valent for the action initiated." But they may be valent only in certain surroundings, or in different circumstances for different types of action. Thus, "The bird will confuse the mimic and its model if they both possess the same valent characters, and not necessarily if they are similar in general form and colour." This helps one to understand not only the value of an *initial, slight*, resemblance, so often felt to be a difficulty, but also the unimportance of difference in size between two species, of which one is claimed to be a mimic. Under the theory of "valents" this does not matter. If you look at the situation not on the supposition that the predator avoids *A* because he thinks it is *A*, but because it reminds him of unpleasant qualities associated with the appearance of *A*, then you can accept the explanation both for complete mimicry in which there is deceptive resemblance, and for all grades below that. This also makes clearer the fact that the division of "mimicry" into two separate classes, Batesian and Müllerian, is another example of false pigeon-holing.

I should like to dwell for a moment on those two supposedly widely separated conditions. As originally described they are, in essence, entirely different, yet how confused do people get about them! For example, take this sentence from a recently published note on experiences at Sierra Leone. The writer had taken the mimetic *hippocoon* female of *Papilio dardanus* Brown, which resembles *Amauris niavius niavius* L. He says, "Both species are probably equally common in this locality; the mimetic factor is therefore more likely to be Batesian than Müllerian." The *Papilio*, however, is not as common as the *Amauris*, but, if it were, the resemblance would be Müllerian and not Batesian. To cry "Wolf" too often is dangerous, and the weak point in Batesian mimicry is that if it is too widely practised it defeats itself. Batesian, Pseudoposematic, resemblance involves deceit—the enemy is so misled by the great likeness of *A* to *A* that he mistakes it for *A*, and leaves it alone because he remembers unpleasant experiences associated with *A*. You may use the term mimicry for this provided you are clear as to the quite passive part played by the insect itself in the development of the resemblance: it is merely a lump of clay in the hands of the potter, Natural Selection. Müllerian, or Synaposematic resemblance involves no suggestion that *A* is *A*, only that it calls to mind the appearance and attributes of *A*. It is reversible—i.e., *A* protects *A* just as *A* protects *A*. This, of course, can occur only when both insects are distasteful. Now, the idealised case is one in which they are equally distasteful, which may be termed the purest case of Synaposematic resemblance. But, as a fact, we find that in a large association with simple warning coloration, such as the black-and-white-tipped, brown, *Danaus chrysippus* L. and its followers, or the black-and-brown Lycid beetles and their mimics, one can arrange the "chrysippoid" or "lycoid" insects in a series forming a chain leading from the most distasteful *chrysippus* or *Lycus* at one end down to species with the same pattern, but which we have no reason to believe are highly, if at all, distasteful—e.g., the mimetic

Liptenine Lycaenid *Mimacraea marshalli* Trimen or a Lycoid Asilid *Ancylo-rhynchus* (= *Xiphocerus*) *cruciger* Loew. Since on this arrangement any link in the chain is more objectionable than its neighbour to the right, but less objectionable than its neighbour on the left, there is thus a Batesian element even if the whole series is taken as a Müllerian association. You will see that under this view the old term "mimicry ring" that was employed for large Müllerian associations will not do, for the two ends of the chain cannot meet: the larger the series, the farther apart are the ends. It can only be a ring if all the members are equally objectionable. A recent essay by W. H. Thorpe (3) has a bearing on the process of development of warning colours in association with objectionable qualities. Discussing "habituation" and "latent learning" he writes, "Anything strange within very wide limits, or a familiar object in a new context is responded to either by an avoiding reaction which may be rapidly extinguished by habituation if no dire results follow, or by cautious investigation. This implies a highly organised background of the familiar against which something new stands out as possibly dangerous and something to be investigated. The investigation completed, this new object is 'built in' to the perceptual world as something which can henceforth be ignored . . ." Thus any new, conspicuous pattern would, at first, score by being avoided, and objectionable qualities would have time to develop. Or, if they already existed, the increase of a doubtful quality of distastefulness could develop into first-class nauseousness. Be it specially noted that the "cautious investigation" would result in the development of the well-known resistant qualities of aposematic insects—it is curious how these qualities are disregarded by those who disbelieve in the efficacy of warning colours.

Let us pass on to another case of false pigeon-holing—*e.g.*, the desire to class any species as either "edible" or "non-edible." How often one finds in literature a note expressing surprise that such-and-such a species, warningly coloured or "supposed to be distasteful," was seen to be captured, or even eaten, by some vertebrate predator, and the statement that this shows what nonsense the theory is! Such a critic might well be asked whether, because on a battlefield a soldier was found dead from a bullet which had pierced his steel helmet, he would consider that a helmet is no protection at all? It never seems to occur to such critics that if there were no captures of distasteful prey by very hungry, or inexperienced enemies, there could be no selection to build up, or maintain, the protective qualities. I have paid especial attention (4) to the attacks of birds upon larvae of *Zygaena filipendulae* L., and find that many *are* destroyed. This is because the time when they are most conspicuous (when exposed on a stem before constructing the cocoon, or in the cocoon in a situation where a bird can get at it to peck it open) coincides with the emergence of fledglings from the nests. The insistent clamour causes even comparatively unpleasant objects to be taken to them as food by the parents. I have seen many cocoons which had been pecked open, the contents investigated, and then left, oozing bright-yellow, acrid-smelling juice: in one case the larva sealed up the cocoon again and eventually emerged as a moth. There can be little doubt that these larvae and pupae have a certain degree of distastefulness, but that does not protect them against every attack by inexperienced or very hungry enemies. Another point to be remembered is that the memory of the predator needs to be constantly refreshed by other attacks after the first has been forgotten. Cott's experiments with the toads and bees (5) showed this clearly, and that lamented great naturalist C. F. M. Swynnerton always insisted on this point in connection with birds.

As another example of false pigeon-holing, let us take the supposition that an insect is either conspicuous or concealed. I remember in my own experiments with a monkey a clear case of border-line between cryptic and conspicuous appearance, and of border-line edibility. The monkey found on the ground a female Acridid, *Lamarekiana loboscelis* Schaum, a large, corpulent, wingless specimen coloured so as to resemble a clod of earth. Individuals vary in shade, sometimes lighter than others, and a light individual on soil that does not match it is far from being procryptic. There is always a dark patch on the side of the thorax, and one can easily imagine how the contrast might be developed until a quite aposematic type of coloration would eventuate. The specimen under consideration was obviously not considered by the monkey to be high-class food, and development of definitely distasteful qualities can be visualised as taking place *pari passu* with the acquisition of aposematic coloration. Thus a cryptic, not markedly distasteful, species would have been transformed into one typically aposematic.

Very interesting are the caterpillars of LASIOCAMPIDAE—among the most cryptic of insects. Yet when disturbed they reveal one or more clefts across the thoracic segments filled with brightly coloured spines. It may be asked, is not crypsis, implying high edibility, in conflict with the possession of an aposeme, supposedly associated with some unpleasing quality? Note that I say “unpleasing quality” and not “distastefulness,” for there is reason to think certain features, such as stings or spines, *need* not mean gustatory unpleasantness. My experimental monkey greedily ate wasp grubs and pupae, and pupae of the ant *Megaponera foetens* F., and even a fiercely stinging Mutillid, after it had been violently rubbed on the ground, was eaten readily. I do not see why a highly cryptic larva could not develop an aposeme such as brightly coloured spines, visible only as a last resort after the cryptic disguise had been found out, without any alteration of its body-juices to make it “distasteful.” I put this combination of defences at a very high level, as an improvement on even the best crypsis. It is safest to escape notice, but if one *is* seen, there is still a last defence.

Let us now pass on to some considerations of mimicry, and explanations put forward by those who cannot accept natural selection. First, the entirely plausible one that similar appearances are due to similar environment.

Poulton long ago pointed out the futility of such an explanation for the mimics of LYCIDAE. The coloration of the mimetic adults, and their models, is laid down in the larval stage, and the larvae of these insects live under exceedingly different conditions of food, parental care, light, temperature and humidity. Study of mimetic butterflies in different parts of their distribution provides equally destructive cases. The female of *Papilio cynorta* F. in West Africa closely mimics the female of the Acraeid *Bematistes epaea* Cr.: both are black and white. Both species are found in Abyssinia, but *epaea* becomes tawny orange, like its male in both West Africa and Abyssinia, instead of white. The female *cynorta*, however, is black and white, but the pattern is slightly different, and it now resembles the Abyssinian* race of *Amauris niavius* L.—a species abundant on the West Coast of Africa, but not serving as a model for *cynorta* in that country. On the west coast of Lake Victoria, in Uganda, *cynorta* is of the black-and-white West African form, but the West African model *epaea* has altered greatly in this area. Instead of being tawny orange in the male and white in the female, both sexes are alike—dark greyish-brown, with the paler areas much contracted and of a cream or butter-yellow colour (*paragea* Gr.-Sm.). Other cases could be cited were there time, but I would pass to another argu-

ment—that the resemblances are accidental, which means that no attempt is made to seek an explanation. But, one may ask, why has accident produced likeness only in *conspicuous* insects? Great numbers of moths and butterflies resemble dead leaves, but the resemblance is often produced by different means, and you do not find one species of “dead-leaf butterfly” so closely resembling another, of widely different affinity, that they are with difficulty separated.

Accidental resemblances undoubtedly occur in different parts of the world, as F. A. Dixey showed long ago (6), but few will compare in perfection with good mimics. One of the most startling is *Cethosia leschenaulti* Godart of Timor and Wetter islands, the upperside of which is like that of our *Nymphalis antiopa* (L.) and very unlike that of its allies. The under surface, however, is of the *Cethosia* type. Closely linked to this argument of accident—perhaps only a more scientific presentation of it—is the explanation by parallel mutation. This, like other objections to the explanation by natural selection, can be countered by taking the wide view of these resemblances which has been discussed earlier—*i.e.*, that mimicry is only a special case of resemblance to a particular part of the surroundings. How can parallel mutation explain the resemblance of a moth to a bird-dropping? Why, then, should it be invoked to explain resemblance to another insect? Of course, if it does occur, Natural Selection will utilise it; but it cannot be invoked in a general way. Parallel mutation scarcely covers cases of resemblance to different objects, or models, at different periods of growth (7) or different times of the year (8). The resemblance on upper surface alone, to a model, such as occurs in those interesting genera *Elymnias* in Asia, *Elymniosis* in Africa and *Protogonius* in tropical America, or in some species of *Telipna* in Africa, if due to parallelism, is an extremely limited example of its operation. The fact that the chemical composition of the pigments in model and mimic, pigments which give sufficiently similar optical effects to be considered as of the same colour, is completely different, is surely an unexceptionable argument against the production of the same effect by parallelism. Detailed study of mimetic butterflies has given grounds for belief that the mimetic likeness may begin in a small way on the under surface, and may later appear on the upper surface. The African Lycaenid *Phylaria cyara* Hew. is a very ordinary blue butterfly on the upper surface, but the underside shows the “mud-drinkers” aposeme; white, with an orange base to the hind-wing and marginal black spots: this pattern is unique among its kin, but is like that of *Mylothris* and other Pierids which associate in numbers on damp mud. I have never seen this butterfly elsewhere than on wet mud, and it would seem to be a genuine case of Batesian mimicry on the under surface only. Among South American PIERIDAE the male *Perrhybris malenka* Hew. shows on the lower surface a faint mimetic likeness to *Mechanitis*, which is immensely better shown on the upper surface in the female. On any other theory than natural selection it is difficult to explain why mimicry should begin on the under surface. The feature of mimicry is that it appeals to the eye: the essence of the phenomenon can be summed up in a few words—*Mimicry deceives the artist but not the anatomist*. Why, on the other hand, should the process of parallel mutation produce effects only on parts that are freely visible? The males of some *Dismorphia* are particularly instructive in this respect: the wings have not become so narrowed as in the female, and the anterior part of the hind-wing, normally covered by the mimetic front wing, retains the Pierid white colour. Another point which may be mentioned here as a further difficulty in the explanation by parallel mutation, was well put by Dixey (9). “Mimetic assimilation aims only at the general effect

of the resemblance and is apt to ignore considerations of mere homology." He figures three butterflies from New Guinea, each, when at rest, showing a very dark underside with a red basal streak. In the *Delias*, which is presumably the model, the streak lies along the costa of the hind-wing; in the Nymphalid *Mynes* it is in the same position, but in the *Huphina* it is along the costa of the front wing. Yet when all the wings are shut down the relative position of these red streaks is very much alike. Another pertinent question is, how comes it that parallel mutation produces mimetic likeness only between *conspicuous* species? (*Vide supra*.)

A quite significant point that requires further study is the fact that of all the fossil butterflies known, not one belongs to the great groups that now show warning colours, such as DANAIIDAE—HELICONIIDAE—ACRAEIDAE. This fits in quite well with selectionist views. For warning colours, in principle, are a second-rate method of defence which cannot stand by itself. An enemy only ceases from attacking a dubious morsel because he can find other, more palatable, food. Warning colours are even a danger by their conspicuousness when insect life is scarce, as in a tropical dry season, or temperate winter: there are few aposematic insects in deserts. Thus, in the early days of butterfly history individuals may well have been scarce, and there was little profit in being conspicuous.

I should like now to descend from the general to the particular, and discuss one of the most remarkable genera of butterflies, *Pseudacraea* of Westwood, of Limenitid stock. Entirely confined to Africa, it is poorly developed in Madagascar, and not known in the Seychelles or Mauritius. There are some nine or ten species, and only two are not mimetic; the others are some of the finest mimics known. The models are *Danaus chrysippus* L. in two of its forms, various species of the Danaine genus *Amauris* and the genera *Bematistes* and *Acraea* among the ACRAEIDAE. The fact that four genera, of two families, are mimicked by this one genus controverts the argument that mimicry is just a case of parallel series. A number of "species" are listed by Aurivillius in Seitz as belonging to the "*eurytus*" group, but there is little doubt that they are all (except *dolomene* Hewitson) members of one species-complex *Pseudacraea eurytus* L. in different stages of sub-specification. All the models for *eurytus* are species of the Acraeid genus *Bematistes* and to some this may seem to support the thesis that this mimicry is merely a case of parallel resemblance. How strange it is, if this is so, that the models always happen to be those species of *Bematistes* which are predominant in the locality. What has mere numerical abundance got to do with parallelism? Perhaps one of the most striking species of *Bematistes*, in size and vivid contrasts of coloration, is *B. formosa* Butl. It is, however, by no means abundant, and, at least so far as is known at present, there is no form of *eurytus* mimicking it, though with this protean species such a form may be discovered any day. To my mind it challenges *Papilio dardanus* Brown as "the most interesting butterfly in the world," to use Poulton's phrase. It is true that the latter shows us in Madagascar and Abyssinia the primitive non-mimetic female, and, in the highlands of Kenya, the steps by which mimetic females were evolved. In *Pseudacraea eurytus* both sexes are mimetic, which is not the case in *dardanus*, but we cannot tell what the original non-mimetic form was like. There are male forms and female forms, each mimicking the corresponding sex of some species of *Bematistes* which is sexually dimorphic; or both sexes may be alike in mimicry of a monomorphic model. One form, confined to the female sex, is derived by a slight change in colour, but not in pattern—a most interesting

point—from a female form which mimics the corresponding sex of a species of *Bematistes* of which the male also serves as a model for a male *eurytus*. The species which this modified female resembles, however, is another *Bematistes* of which the sexes do not differ. Lastly, in one area where there is only one species of *Bematistes* to serve as model, the local *eurytus*, possibly a geographical sub-species, has two forms of female, mimicking each sex of the dimorphic model—the only case in this great complex of a female mimicking a model of the opposite sex. The distribution of *eurytus* is most interesting, for it is one of the pointers to the conclusion that the forested areas in Africa were formerly much more continuous. In East Africa it occurs in the forested highlands of Abyssinia and the forested mountain region along the Sudan–Uganda frontier. Thence at intervals in suitably forested areas southwards through Uganda and Kenya into the coastal districts of Usambara, and the Semliki Valley. Tanganyika Territory, except for Usambara, seems unsuitable for it now. It is found again in closely similar forms in Nyasaland and Natal, as far south as Pondoland. I have seen no specimen or records of it from Rhodesia or Mozambique¹: the Zambezi system is quite free from this butterfly. Its western distribution seems to be throughout the forest regions, as far as Angola, Kassai and Katanga in the south. The dry northern belt excludes it from reaching the parallel of 10° N., the nearest locality I have found being Konakri in French Guinea; even in Abyssinia it keeps south of the 10° parallel.² It is not usually considered to be abundant, yet in Uganda it is not uncommon, though never so common as another species of the genus, *Pseudacraea lucretia* Cr. The great collections made without selection by Dr. C. A. Wiggins at Entebbe, May 1909 to May 1913, provided 379 specimens of all forms of *Pseudacraea eurytus* and 1617 of the models, species of *Bematistes*. Male *Bematistes* unless serving as models (e.g., *B. poggei*) are not included. This proportion suggests Batesian relationship, which is supported by the behaviour of the respective insects. Mr. T. H. E. Jackson, who has greatly helped me with specimens, has recently found it less scarce in the eastern part of the Congo forest than I was led to believe from published accounts, and from the report which M. Ghesquière kindly furnished on the specimens at Tervueren. *Pseudacraea eurytus* has been the subject of prolonged study ever since Doctor K. Jordan in 1911 (10), from study of variations and of genitalia, announced that a large number of so-called species must be considered as one interbreeding community. I am at present engaged in preparing a monographic study of this community, and will only say now that its southern representative in Natal has only one form, sexually dimorphic, which may possibly have become so distinct by isolation that it cannot interbreed with the other forms. I greatly wish that pupae from Natal could be sent to be hatched and mated with local forms in Uganda; it could be done by air and might prove most interesting. Indeed, there is a marvellous complexity in Uganda alone which should provide material for genetical research, and I would urge this problem upon geneticists.

The interesting phenomenon of *Secondary Mimicry*, of which not very many examples have been described, is, I believe, shown by a form of *eurytus* in Uganda. Secondary mimicry may be found in an association in which there are several distinct species resembling in general the salient features of a common

¹ Captain R. H. R. Stevenson of Southern Rhodesia has since told me of specimens from Dondo and Amatongas along the Beira–Rhodesia railway.

² There is one exception: a male specimen from Gambia in the National Collection of the form *e. eurytus*. The National Collection possesses an aberrant specimen of the female form *poggeoides*, with data “Wad Medani, Sudan,” but I find it hard to believe the accuracy of this.

model. But in the smaller details they are not all the same, and among the mimics themselves there may be one, perhaps larger and more powerful than another, which has minor characters all its own. These special characters, while not greatly detracting from the resemblance to the model, may be also found in another mimic, and Poulton suggested that the less powerful mimic may have acquired a secondary resemblance to its larger or more dominant fellow. The view that I put forward earlier in this address that such an association with common coloration should be regarded as a chain rather than a ring fits in well with secondary mimicry. As an example there is a male form of *Pseudacraea eurytus*, *hobleyi* Neave, which in Uganda mimics the male of *Bematistes macarista* E. Sharpe, which is also mimicked by both sexes of the larger and very distinct eastern race *neumanni* Thurau of the species *Pseudacraea gottbergi* Dewitz. The orange fore-wing band of *macarista* and *hobleyi* is not acutely angled, and not narrowed in front, but this is the case in *neumanni*. There is in Uganda, in localities where *neumanni* is found, a variation of *hobleyi* showing the angulation, narrowing, and also slightly darker colour, of the fore-wing orange band, which produces a resemblance to *neumanni*. This I named *künnowoides*.³

Pseudacraea eurytus is particularly interesting in Abyssinia, for it occurs in forms now characteristic of Uganda (*terra* Neave and *tirikensis* Neave) as well as a typically West African form (*youbdonis* Ungemach, derived from *striata* Butler) and another (*mimoras* Ungemach) peculiar to Abyssinia. This illustrates the former closer connection of Abyssinia with the west, probably by means of riparian "gallery-forests," which is shown by many groups of animals: the form *striata* is now not found farther east than 20° E. (in the Belgian Congo), and is not known even from the Semliki valley, where west does meet east to a considerable extent. It is really a "coast" species.

There is usually remarkable correspondence between common species of *Bematistes* and the forms of *eurytus* in any locality, and two interesting examples may be quoted, because the first has been completely overlooked since it was first described, and the second, originally described from a single female, has now provided a number of examples, including males. The question is also linked with a species of *Acraea* illustrating a weak point in the argument for production of mimicry by parallel mutation. *Bematistes quadricolor* Rogenhofer exists in mountainous regions of East Africa, the Ruwenzori area in western Uganda, the highlands of Kenya, and of Tanganyika Territory. The race inhabiting western Uganda is *latifasciata* E. Sharpe, and it is resembled by a local race *butleri* Aurivillius of the common *Acraea johnstoni* Godman, confined to that area. A unique specimen of *Pseudacraea* was described by Grunberg as *ruwenzorica* in 1912, but was ignored by Aurivillius in Seitz, and has never been taken since. The good figure leaves no doubt that it is a mimetic form of *eurytus*, following *B. quadricolor latifasciata*. Another locality for that *Bematistes* is Mt. Elgon and neighbouring highlands of Kenya Colony, where *Acraea johnstoni* is found in considerable variety, but not resembling *quadricolor*. Thus, the parallelism fails in this locality. At the present time there is no form of *Pseudacraea eurytus* in the Elgon area which resembles *B. quadricolor*: the species does not exist there, but follows the other models resembled in the adjoining lowland area of Uganda. However, on Marsabit mountain, between Nairobi and Lake Rudolf, an undoubted form of *eurytus* occurs—*victoris* Eltringham, described from a female in 1929, but now better known from Mt.

³ At that time *künnowi* Dewitz was thought to be a species separate from *gottbergi*, and its eastern race in Uganda was named *neumanni*.

Meru, a little north of Nairobi. This has a fair likeness to the local race of *Bematistes quadricolor*—namely, *leptis* Jordan, which is reported to be plentiful there: I have no information whether other species of *Bematistes* and forms of *eurytus* are known from that locality. The nomino-typical race of *B. quadricolor* Rogenhofer, occurring from Kilimanjaro to Arusha, has no form of *eurytus* to mimic it, nor has the race which is found in the Usambara mountains. The facts seem to indicate that *B. quadricolor* is a “weak” model, for *Pseudacraea eurytus* does occur in Usambara in a form *conradti* Oberthur mimicking another species of *Bematistes* quite different from *quadricolor* in appearance—namely, *adrasta pancalis* Jordan. *B. quadricolor* perhaps only serves as a model when no other species can provide a better one. On Mount Elgon it is not copied by *Acraea johnstoni*, which seems to find *B. poggei* Dewitz and *DANAIDAE* better models. This assemblage of facts seems to me strongly to controvert the theory of parallelism.

One of the most interesting facts that has arisen from the intensive study of *eurytus* in Uganda is the close harmony between numbers of models as compared with the mimetic species, and the appearance of that species. In the presence of superabundant models the forms of *eurytus* show very close resemblance to them. But if the numbers of models are not greatly superior to, or even less than, those of *eurytus*, the latter may be found in great variety, showing forms transitional between the different mimetic forms, or even distinct from them. In the absence of models to protect them, there is no reason why one form of *eurytus* should escape predators more than another. There is good correspondence between *Bematistes* and *eurytus* in the larger areas of their distribution. The West African type of coloration, with brownish bar on fore-wing and brown hind-wing, does not occur to the east of the Semliki Valley in either models or mimics; it is found among the forms of *eurytus* in the south-west Sudan, however—another example of the close association of that area with West Africa. The deep golden-yellow forms, *B. tellus eumelis* Jordan and *eurytus terra* Neave, are especially characteristic of Uganda, though that type of coloration does occur to the west. In Natal there is only one species of *Bematistes*, and one dimorphic form of *eurytus* mimicking it. A slight modification of each of these occurs on Mt. Mlanje, Nyasaland. Black-and-white female forms occur throughout the area of distribution, resembling appropriate local species of *Bematistes*. There is reason to believe that we can now watch a change occurring in the usual *Bematistes*-*Pseudacraea* association as a result of the spreading into Uganda of a *Bematistes* from the east, a form of *aganice*. Nominotypical *B. aganice* Hewitson is a South African species, but it extends as *aganice montana* Butler, northwards through Tanganyika Territory into Kenya as far as the Mau escarpment, and across the Kenya-Uganda frontier in a slightly different form, *ugandae* Van Someren, into Eastern Uganda. Now, our oldest large collections from Entebbe on the north shore of Lake Victoria, made by Dr. C. A. Wiggins from May 1909 to May 1913, contain 1618 specimens of various species of *Bematistes*, but only one male and six female *aganice*. There are a few records of earlier date in the National Collection—a female from Usoga (eastern Uganda) March 1899, and nine males and four females from Kampala certainly before 1905, and a male and female from Entebbe, 1908. When I lived and collected on the Sese Islands in Lake Victoria (Damba, Kome, and Bugalla) in 1911 and until April 1913 I never saw this species, and was therefore much astonished to find it in numbers in 1914, and in subsequent years I found it firmly established and abundant on Kome Island and its smaller neighbours, though it was not on Bugalla in 1929. It would be most interesting

to obtain new collections from my old collecting grounds. Dr. Van Someren found it plentiful on both sides of the Nile at Jinja, 1919-23; in fair numbers in the Mabira forest, between the Nile and Entebbe, 1919-23, and a very few at Entebbe in 1920.

Now, while the female *aganice* in Uganda has a pattern closely similar to that of the predominant *B. macarista* and *B. alcinoë camerunica* Aurivillius, the male has a light brownish-orange hue and a pattern not like that of any other *Bematistes* in Uganda. It was most interesting to find that in a small collection of *Bematistes* and *Pseudacraea eurytus* made in Eastern Uganda in 1923, in which *aganice* greatly predominated, one male of the six *eurytus* collected was of a form not hitherto distinguished, with all the pale areas on the wings of a dark tawny-orange colour, and the provisional inference was drawn that this was due to selection towards the coloration of the male *aganice*, although the pattern on the fore-wing is not quite the same: this form was then named *opisthoxantha* Carpenter. In 1929 I made a small collection from Buvuma Island lying in the gulf which gives rise to the Nile at Jinja, and obtained the following: *B. aganice* 6, *B. poggei* 1; *Ps. eurytus opisthoxantha* 1, *hobleyi* 4, all transitional to *opisthoxantha*, 2 *tirikensis* Neave (the black-and-white female form) and 1 *obscura* Neave. These results so obviously needed extending that I recently sought the help of the biological staff of Makerere College, Uganda, and with their aid obtained a good series of captures by a native veterinary student (see table).

This collection shows how *B. aganice* predominates, and that a larger proportion of male *Pseudacraea eurytus* have the hind-wing band orange like that of the front wing than in any area where the predominant models (*B. poggei* male and female, and *B. macarista* male) have the hind-wing band white. It would be of extreme interest to obtain from the neighbourhood where the earliest collections (now compared with the Buvuma Island series) were made by Dr. Wiggins at or near Entebbe, further large collections, to see whether the establishment of *aganice* as an abundant insect, in the presence of the hitherto predominant models *macarista* and *poggei*, has had an effect on the *Pseudacraea* population. Dr. Wiggins' collection of 357 *eurytus* contained eighty *hobleyi* with white hind-wing band and only three *opisthoxantha* with orange band on hind-wing; among the *Bematistes* there were 422 male *macarista* and 145 male and female *poggei* with white hind-wing, and only one male *aganice* with the orange-brown hind-wing.

I think I have said enough to show how very interesting this polymorphic *Pseudacraea eurytus* is, and what fine material for the study of variation and mimetic resemblance. But it is not, presumably, unique. I think that the tropical American genus *Protopgonius* could provide equally interesting results if studied bionomically by large collections made without selection and studied numerically. It is regrettable that the fauna of the land where mimicry was first observed should have provided so little evidence of the sort that has come from Africa. Work on the American fauna seems to have been taxonomic rather than bionomic, and collections made rather to obtain rarities than to study the interaction of members of the population on each other. By such studies we can draw nearer to understanding the processes which have resulted in mimicry, by natural selection, as I firmly believe. Bates' great theory, reinforced by that of Fritz Müller, has survived ridicule; it still has to meet misrepresentation by those who do not trouble to understand it, or criticise it from very narrow grounds, and with arguments of limited application. Harm is done also by rash over-statement, unsupported by adequate facts, and I

Models, species of *Bematiestes*.Mimics, forms of *Pseudacraea eurytus* L.

	Colour scheme	Sex	Buvuma Isle	Entebbe		Colour scheme	Sex	Buvuma Isle	Entebbe
<i>aganice ugandae</i> Van Someren	1	M	70	1	{	<i>Opisthorantha</i> Carpenter Trans. fr. <i>opisth.</i> to <i>hobleyi</i> Neave	M	16	3
" "	2	F	44	6			M	29	2
<i>macarista macarista</i> * E. Sharpe	3	M	0	197	{	<i>hobleyi</i> (with h.w. bar partly yellow) <i>hobleyi</i> || (with h.w. bar pure white)	M	13	30
<i>macarista rileyi</i> Le Doux	3	M	3	207			M	0	43
<i>macaria hemileuca</i> Jordan	3	M	0	2	{	<i>hobleyi</i> (not seen) <i>tirikensis</i> Neave	M	0	5
<i>macarista</i> † (both forms)	2	F	1	266			F	42	164
<i>alcinoë camerunica</i> † Auriv.	2	F	0	59	{	<i>poggeoides</i> Poulton <i>terra</i> Neave	F	2	2
<i>poggei nelsoni</i> § Grose-Smith	3	MF	20	144			MF	0	83
<i>tellus eumelis</i> Jordan	4	MF	1	670	{	<i>obscura</i> Neave	MF	3	3
<i>epaea paragea</i> Grose-Smith	5	MF	4	43					
Total				1595 + 23	Total				335 + 22

COLOUR SCHEMES

The ground colour of all is dark blackish or greyish-brown, with white, yellowish, orange, or tawny orange, paler areas. The fore-wing has an antero-posterior band, or a subapical with an inner marginal patch; the hind-wing has dark border of varying width, and the remainder is paler.

1. Paler areas tawny orange on both wings: fore-wing crossed by band.

2. Subapical, inner marginal, and hind-wing area, white.

3. Fore-wing band orange; hind-wing band white, but the anterior part of it may be suffused with yellow, as in *m. macarista* and the corresponding form of *hobleyi*.

4. All pale areas orange: fore-wing has subapical and inner marginal areas.

5. Pale areas greatly reduced, and creamy-yellow.

* Add eighteen more male *macarista*, recorded, but not seen by the author and hence not ascribed to either form.

† Add four more females, recorded, but not seen by the author.

‡ Male *alcinoë* not counted, as it does not serve as a model.

§ One *poggei* of the western race *p. poggei* Dewitz should be added to the Entebbe total.

|| The sub-form of *hobleyi*, *kinovoides* Carpenter should be added to the *hobleyi* with pure white hind-wing bar. Twenty-two of this form, or transitions to it from *hobleyi*, were taken at Entebbe, and thirty-four of its model, *Pseudacraea gotbergi neumanni* Jordan. Neither has been taken on Buvuma.

plead for more experimental evidence on such points as relative edibility and the preferences of predators. So far as I know, no adequately conducted experiments of such a kind have done other than confirm the theory of aposematic colouring. How futile, then, is the statement made by one writer (11) that if the doctrine of natural selection "can emerge minus its sexual selection, its warning colours, its mimicry, and its signal colours, the reaction over the end of the century will have been a distinct advantage." Instead of vague statements, either for or against, explanation based on Natural Selection, let us have evidence, and we shall arrive at the truth.

May I, in conclusion, quote a few lines by William Watson, entitled: "What Science says to Truth"?

As is the mainland to the sea,
Thou art to me :
Thou standest stable, while against thy feet
I beat, I beat.

Yet from thy cliffs so sheer, so tall
Sands crumble and fall ;
And golden grains of thee my tides each day
Carry away.

Golden grains, however, are not always secured and borne away so easily, and the seeker after truth may find himself beating against rock of quartz hardness only to be quarried by special methods used by exceptional persons. Such were Newton and Darwin. If you feel that what has been laid before you to-night is harmonious with, and indeed depends on, the principle of Natural Selection laid down by Darwin and Wallace, I shall be amply rewarded. So I lay down the Presidential pen and welcome my successor, well known to you all. I should like again to express my gratitude for the honour you accorded me by electing me two years ago, and I wish especially to thank the officers for their unflagging zeal on behalf of our Society and the work they have so effectively done to make it prosper.

REFERENCES.

1. STEPHENSON, E. M., and STEWART, C., 1946, *Animal Camouflage*. Harmondsworth. [Pelican Books.]
2. CARTER, G. S., 1946, Mimicry, Protective Resemblance and Animal Behaviour. *Science Progress* **135** : 547-51.
3. THORPE, W. H., 1944, Some Problems of Animal Learning. *Proc. Linn. Soc. Lond.* **156** : 70-83.
4. CARPENTER, G. D. Hale, 1945, Bionomic Notes on a Colony of *Zygaena filipendulae* L. (Lep.). *J. Soc. Brit. Ent.* **2** : 280-4.
5. COTT, H. B., 1936, The Effectiveness of Protective Adaptations in the Hive-bee, Illustrated by Experiments on the Feeding Reactions, Habit Formation, and Memory of the Common Toad (*Bufo bufo bufo*). *Proc. zool. Soc. Lond.* **1936** : 111-33.
6. DIXEY, F. A., 1913, Mimicry in Relation to Geographical Distribution. *Proc. ent. Soc. Lond.* **1913** : lx-lxix.
- 7A. UVAROV, B. P., 1922, A New Case of Transformative Deceptive Resemblance in Long-horned Grasshoppers. *Trans. ent. Soc. Lond.* **1922** : 269-74.
- 7B. MATHEW, A. P., 1934, Transformational Deceptive Resemblance as Seen in the Life-history of a Plant-bug (*Riptortus pedestris*), and of a Mantis (*Evan-tissa pulchra*). *J. Bombay nat. Hist. Soc.* **37** : 803-13, plate 1.

8. DIXEY, F. A., 1911, Mimicry. *Proc. I. Int. Congr. Ent.* (Brussels, 1910) 2 : 374-5.
 9. DIXEY, F. A., 1920, The Geographical Factor in Mimicry. *Trans. ent. Soc. Lond.* 1920 : 208-11, plate 6.
 10. JORDAN, K., 1911, The Systematics of some Lepidoptera which Resemble Each Other, and their Bearing on General Questions of Evolution. *Proc. I. Int. Congr. Ent.* (Brussels, 1910) 2 : 385-404, plates xxi-xxiv.
 11. SHULL, A. Franklin, 1936, *Evolution* : 212. New York.
-

At the close of the meeting the PRESIDENT, on behalf of the Council and Fellows of the Society, made a presentation to Mr. Francis J. Griffin, in recognition of his services to the Society during his Registrarship. The PRESIDENT said :—

MR. FRANCIS GRIFFIN—You were appointed Registrar in July 1929 when important changes in the affairs of the Society were taking place, and the Honorary Officers could no longer cope with the whole of the work unaided. The construction of the present meeting room, the expansion and re-arrangement of the library, the organisation of the Society's offices and general routine work were the main tasks confronting you. The steady expansion of the Society's activities, and the high standard of technical excellence achieved by our publications, are some measure of your success. The full measure of your services to the Society during the seventeen years that you have been with us cannot be recorded in a few words. Now that you are one of the Fellows we hope often to see you : we wish you every success in your new post, and we ask you to accept this small gift as a token of a long and happy association.

The PRESIDENT, on behalf of the Council, also made presentations to Miss Evans and Sergeant Campbell in respect of their service to the Society during the war years. He said :—

MISS EDITH EVANS—You have now been with us for fourteen years, and the Council feel that the Society owes you special recognition for the constant loyalty with which, during the arduous period of the war, you stood by us and kept the machinery running through the many difficulties. I have no need to emphasise your efficiency and readiness to help, for they are so well known to all of us. Fellows will, I feel sure, be delighted to hear that you have been offered, and have accepted, the post of Registrar, with effect from 1st January, 1947. I have much pleasure in asking you to accept a wireless set in token of our esteem.

SERGEANT CAMPBELL—You came to us at the time when the first fury of air attack was beginning to abate, and have stood by us faithfully ever since. Your unceasing attention to the maintenance and repair of our premises, and your constant cheerfulness under all forms of adversity, have been of the greatest value to the Society. With this tribute I would like to associate your wife, who has proved herself so capable and charming a hostess at tea-time. I ask you to accept a small token of our gratitude for your interest in our affairs, both in war and peace.

LIST OF FELLOWS

OF THE

ROYAL ENTOMOLOGICAL SOCIETY OF LONDON.

HONORARY FELLOWS.

Date of
Election.

- 1915 † HOWARD, Dr. L. O., *Ex-Chief, Bureau of Entomology, U.S. Dept. of Agriculture, Washington, D.C., U.S.A.*
- 1946 LIMA, Dr. A. da Costa, Professor of Entomology, *Escola Nacional de Agronomia, Universidade Rural, Rio de Janeiro, Brazil.*
- 1931 † SILVESTRI, Prof. F., *R. Istituto Superiore Agraria, Portici, Naples, Italy.*
- 1937 SNODGRASS, R. E., *Bureau of Entomology, U.S. Dept. of Agriculture, Washington, D.C., U.S.A.*
- 1937 WEBER, Dr. Hermann, Ord. Professor für Zoologie und Vergleichende Anatomie, Direktor des Zoologischen Instituts und Museums der Universität, Münster i. Westf., *Aegidiistrasse 39, Münster i. Westf., Germany.*

SPECIAL LIFE FELLOWS.

Date of
Election.

- 1944 † (1904) BLAIR, Kenneth G., D.Sc. (PRESIDENT, 1940-1; V.-PRES., 1942; COUNCIL, 1918-20, 1931-3, 1942), *Pentwyn, Freshwater, Isle of Wight.*
- 1926 (1891)* FROHAWK, F. W.
- 1944 † † (1912) IMMS, A. D., M.A., Sc.D., F.R.S. (PRESIDENT, 1936-7; V.-PRES., 1920, 1930, 1935, 1938; COUNCIL, 1919-21, 1930-2, 1935, 1938), *Faldenside, Tipton St. John's, nr. Sidmouth, Devon.*
- 1945 † † (1894) JORDAN, K., Ph.D., F.R.S. (PRESIDENT, 1929-30; V.-PRES., 1909, 1926, 1931, 1933; COUNCIL, 1909-11, 1924-26, 1931, 1933-35), *The Museum, Tring, Herts.*
- 1944 † † (1885) LLOYD, R. W. (V.-PRES., 1924, 1928, 1932, 1933; COUNCIL, 1900-3, 1923-5, 1928-30, 1932-4), I, 5, *Albany, Piccadilly, London, W. 1.*
- 1945 † † (1899) MAIN, Hugh, B.Sc., F.Z.S. (V.-PRES., 1941; COUNCIL, 1908-10, 1939-41), 9, *Woodside-road, Woodford Wells, Essex.*
- 1945 † (1903) NEAVE, S. A., C.M.G., O.B.E., M.A., D.Sc., F.Z.S. (PRESIDENT, 1934-5; SECRETARY, 1919-33; V.-PRES., 1918, 1931, 1936; COUNCIL 1916-18, 1936), *Mill Green Park, Ingatestone, Essex.*
- 1926 (1890) NEWSTEAD, Prof. R., M.Sc., F.R.S., A.L.S., Hon. F.R.H.S.
- 1931 (1905) POWELL, H.
- 1942 † (1908) TALBOT, G., 31, *York-road, Woking, Surrey.*
- 1943 † † (1901) WATERHOUSE, G. A., D.Sc., B.E., *Australian Museum, College-street, Sydney, New South Wales, Australia.*
- 1933 † (1906) WHEELER, The Rev. George, M.A. (SECRETARY, 1911-21; V.-PRES., 1914; COUNCIL, 1921), *Ellesmere, Gratwicke-road, Worthing.*

FELLOWS.

(The names of those who have not yet paid either the Entrance Fee or the first year's subscription are not included.)

Marked * died during the year 1946.

Marked † have compounded for their Annual Subscriptions.

Marked ‡ have been formally admitted into the Society (to December 1946).

Date of
Election.

- 1946 ABBOTT, P. H., B.A., M.R.C.S., L.R.C.P., *Medical Inspector, Sudan Medical Service, Rumbek, Equatorial Province, Sudan.*
- 1945 ADAMS, C. V., F.Z.S., 16, *Munroe-gardens, Alma-road, Plymouth, Devon.*
- 1938 ADAMS, P. C. G., *European Hospital, N'Kara, Northern Rhodesia.*
- 1902 ‡ ADKIN, B. W., *Highfield, Pembury, Tunbridge Wells.*
- 1943 ‡ AIRY-SHAW, H. K., B.A., *Royal Botanic Gardens, Kew, Surrey.*
- 1921 ALEXANDER, Prof. C. P., *Fernald Hall, Massachusetts State College, Amherst, Mass., U.S.A.*
- 1931 ALFIERI, Anastase, General Secretary and Curator of the Fouad 1st Entomological Society, *P.O. Box 430, Cairo, Egypt.*
- 1938 ALFREY, J. I., *The Bombay Fire Insurance Association, 6, Rampart Rau Fort, Bombay, India.*
- 1946 ALLAN, Capt. I. R. H., 4, *Windhill, Bishop's Stortford, Herts.*
- 1944 ‡ ALLAN, P. B. M., M.A., 4, *Windhill, Bishop's Stortford, Herts.*
- 1943 ALLEN, Donald, F.R.P.S., 698, *Warwick-road, Solihull, Warwickshire.*
- 1940 ‡ AMERY, J. W., *Ballamoar, Laxey, Isle of Man.*
- 1919†‡ ANDREWES, Dr. C. H., F.R.S. (COUNCIL, 1945-), 34, *Ossulton Way, N. 2.*
- 1910†‡ ANDREWES, H. E. (COUNCIL, 1920-2), 8, *North Grove, Highgate, London, N. 6.*
- 1922 ‡ ANDREWES, H. L.
- 1932 ‡ ANDREWS, E. A., M.A. (COUNCIL, 1943-5), 2, *Abbey-gardens, St. John's Wood, N.W. 8.*
- 1899 ‡ ANDREWS, Henry W. (COUNCIL, 1930-2), *The Wigwam, Aldwick-avenue, West Bognor Regis, Sussex.*
- 1908†‡ ANTRAM, Charles B., *Clay Copse, Sway, nr. Lymington, Hants.*
- 1913*† ARMYTAGE, E. O.
- 1907 ‡ ARNOLD, G., O.B.E., D.Sc., A.R.C.S., F.R.S.S.A., Corr. M. Amer. ent. Soc., F.Z.S., *Box 240, Bulawayo, South Africa.*
- 1899†‡ ARROW, G. J. (COUNCIL, 1905-7), 9, *Rossdale-road, Putney, S.W. 15, and British Museum (Natural History), Cromwell-road, S.W. 7.*
- 1944 ARTHUR, D. R., M.Sc., *Advisory Research Dept. in Agricultural Zoology, University College, Cathays Park, Cardiff.*
- 1946 ‡ ASHBY, D. G., *P.O. Avondale, Salisbury, S. Rhodesia.*
- 1942 ASHCROFT, E., F.R.H.S., 39, *Leyland-road, Penwortham, Preston, Lancs.*
- 1946 ASHFORTH, H., 1A, *Kenilworth-road, Leamington Spa, Warwickshire.*
- 1921 ATKINSON, D. J., c/o Messrs. Grindlay & Co., 54, *Parliament-street, S.W. 1.*
- 1928 ‡ AUBERTIN, Miss Daphne, M.Sc., F.L.S., *The Priory, Berwick St. John, Shaftesbury, Dorset.*
- 1946 AUBROOK, E. W., *Tolson Memorial Museum, Ravensknowle, Huddersfield, Yorks.*

- 1930-41, 1945 AUSTIN, M. D., *The Field Laboratory, Porters Farm, Gt. Braxsted, nr. Witham, Essex.*
- 1945 ‡ AVERY, R. F., M.A., 3, *Panmuir-road, West Wimbledon, S.W. 20.*
- 1913 AVINOFF, A., Director, *Carnegie Museum, Pittsburg, U.S.A.*
- 1904 ‡ BAGNALL, Richard S., D.Sc., F.R.S.E., F.L.S., 9, *York-place, Edinburgh, and 3, St. Helens Terrace, Low Fell, Gateshead-on-Tyne.*
- 1909 ‡ BAGWELL-PUREFOX, Capt. Edward, F.Z.S. (COUNCIL, 1930-2), *The Cottage, East Farleigh, Kent.*
- 1934 BAILEY, Lt.-Col. F. M., C.I.E., *Hill House, Northrepps, Cromer, Norfolk.*
- 1943 BAKER, Capt. D. B., 21, *Quarry Park-road, Cheam, Surrey.*
- 1934 BAKER, F. T., *City and County Museum, Lincoln.*
- 1938 ‡ BALFOUR-BROWNE, J. W. A. F., M.A., F.Z.S., *British Museum (Natural History), Cromwell-road, London, S.W. 7.*
- 1921 ‡ BALFOUR-BROWNE, Prof. W. A. F., F.R.S.E., F.L.S., F.Z.S. (V.-PRES., 1934; COUNCIL, 1925-7, 1933-5), *Brocklehurst, Collin, Dumfries, N.B.*
- 1944 BALTER, R. S. D., 18, *Ferncroft Avenue, Hampstead, N.W. 3.*
- 1946 ‡ BANERJEE, S. N., *Rothamsted Experimental Station, Harpenden, Herts.*
- 1946 BARBER, C. H., *Wingfield, Much Birch, Hereford.*
- 1946 BARNETT, E., 64, *Whitworth-road, South Norwood, London, S.E. 25.*
- 1943 BARRATT, Peter R., 88, *Manley-road, Oldham, Lancs.*
- 1902 ‡ BARRAUD, P. J., *The Cottage, Kyrchil-lane, Colehill, Wimborne, Dorset.*
- 1936 BARTHOLOMEUZ, Dr. G. F., *Office of Medical Entomologist, Torrington-square, Colombo, Ceylon.*
- 1946 BATES, Marston D., *The Rockefeller Foundation, Apartado 757, Villaviciencio, Colombia, S. America.*
- 1935 BAUM, W. W., *Health Department, 17, Friar-lane, Leicester.*
- 1908 BAYFORD, E. G., 16, *Rockingham-street, Barnsley.*
- 1912 ‡ BAYNES, E. S. A., c/o Messrs. Glyn Mills & Co., *Child's Branch, 1, Fleet-street, London, E.C. 4.*
- 1945 BEAUFOY, S., B.Sc., A.M.I.E.E., F.R.P.S., 98, *Tuddenham-road, Ipswich, Suffolk.*
- 1913 ‡ BEDFORD, Capt. H. W., *The Spinney, Addlestone, Surrey.*
- 1920 ‡ BEESON, C. F. C., C.I.E., M.A., D.Sc., *Westway Cottage, Adderbury, Banbury, Oxon.*
- 1939 BEIRNE, B. P., Ph.D., 4, *Tobernea-terrace, Monkstown, Co. Dublin, Eire.*
- 1943 BELL, A. Victor, *Eastholme, 24, Studley Villas, Forest Hall, Newcastle-on-Tyne.*
- 1936 BELL, T. R., C.I.E., *Karwar, N. Kanara District, Bombay Presidency, India.*
- 1940 BENGRY, R. P., M.Sc., *Mico College, Cross Roads P.O., Kingston, Jamaica, B.W.I.*
- 1933 BENSON, H. J. Craufurd, B.Sc., *The Cooper Technical Bureau, Berkhamsted, Herts.*
- 1925 ‡ BENSON, R. B., M.A. (V.-PRES., 1943; COUNCIL, 1936-8, 1942-4), *British Museum (Natural History), Cromwell Road, London, S.W. 7.*
- 1946 BENTLEY, E. W., c/o Ministry of Food, 58, *High Holborn, London, W.C. 1.*
- 1937 BERKELEY, M. S.
- 1946 BERNACCA, J. P., B.Sc., *P.O. Box 41, Kampala, Uganda.*
- 1942 ‡ BESSEMER, H. Douglas, B.A., F.C.A., F.R.P.S.L., 23c, *Cadogan Gardens, Sloane Square, London, S.W. 3.*

- 1913 † BEST-GARDNER, Charles C.
 1946 BETT, W. R., M.R.C.S., L.R.C.P., 11, *The Avenue, Bedford Park, London, W. 4.*
 1937 † BHADURI, Lt.-Col. D. N., I.M.S., c/o Messrs. Thos. Cook & Son, *Hornby-road, Bombay, India.*
 1946 BICKERSTAFF, F., 71, *Staithe-road, Bungay, Suffolk.*
 1946 † BIGGS, Rev. H. E. J., *The Rectory, Mellis, nr. Eye, Suffolk.*
 1944 BILLES, D. J., *West African Cacao Research Inst., P.O. Box 8, Tafo, Gold Coast.*
 1935 BINNS, H. R., M.A., *Govt. Vet. Laboratory, P.O. Box 658, Tel-Aviv, Palestine.*
 1944 BIRD, J. F., *Redclyffe, Waltone, St. Mary, Clevedon, Somerset.*
 1937 † BLACKISTON, Maj. Hamilton, B.A., F.L.S., *Frieston Lodge, Old Shoreham-road, Hove, Sussex.*
 1944 BLAKE, A. E., K.L.B., F.C.I., c/o 1, *Shrubland-road, Colchester, Essex.*
 1943 BODDY, William, *Church Fenton, Tadcaster, Yorks.*
 1937 † BODENHEIMER, Dr. F. S., *Hebrew University, Jerusalem, Palestine.*
 1921 † BOLTON KING, E., *Christ Church, Oxford.*
 1939 † BOLWIG, N., *University of the Witwatersrand, Johannesburg, S. Africa.*
 1902 † BOSTOCK, E. D., *Alicoombe, Pelham-gardens, Folkestone.*
 1894 † BOWLES, E. Augustus, M.A., *Myddelton House, Enfield, Middx.*
 1921 † BOX, H. E., *Direccion de Agricultura (M.A. & C.), Depto de la Cãna de Azucar, El Paraíso, Caracas, Venezuela.*
 1910 BOYD, Major A. Whitworth, *Frandle House, nr. Northwich, Cheshire.*
 1905 BRACKEN, Charles W., B.A., 16, *De la Hay Villas, Plymouth.*
 1946 † BRADDELL, M. L., *Little Grove Priory, Chesham, Bucks.*
 1919 † BRADLEY, Prof. J. Chester, M.Sc., Professor of Entomology and Curator of Invertebrate Zoology, *Cornell University, Ithaca, New York, U.S.A.*
 1944 † BRAHAM, A. C., F.Z.S., 66, *Sheepridge-road, Huddersfield, Yorks.*
 1946 † BRAID, K. E. P., A.M.I.E.E., 125, *Sandringham-crescent, South Harrow, Middx.*
 1946 BRANGHAM, Lt.-Col. A. N., 9, *St. Albans-grove, Kensington, London, W. 8.*
 1946 BREDO, H., *Red Locust Control Service, Abercorn, N. Rhodesia.*
 1920 † BRENCHLEY, Winifred E., D.Sc., F.L.S., *Rothamsted Experimental Station, Harpenden, Herts.*
 1944 † BRETHERTON, R. F., *Merifield, Dean Court-road, Cumnor Hill, Oxford.*
 1930 BREYER, Alberto, *Calle Maipu 267, Buenos Aires, Argentina.*
 1941 BRINDLE, A., 134, *Smith-street, Nelson, Lancs.*
 1909 † BRITTEN, Harry, 22, *Birch-grove, Levenshulme, Manchester.*
 1936 † BRITTON, E. B., M.Sc., *British Museum (Natural History), Cromwell-road, S.W. 7, and 97a, Hare Lane, Claygate, Surrey.*
 1942 † BROADHEAD, Edward, *Zoology Dept., University College of the South West, Exeter, Devon.*
 1925 † BROOKS, C. J., 49, *Harvard Court, Honeybourne-road, N.W. 6.*
 1938 BROOKS, J. G., Capt., R.A.M.C., B.D.Sc., L.D.Q., *P.O. Box 354, Cairns, Queensland, Australia.*
 1940 † BROOME, R. R., *Murstead, 47, Keswick-road, Boscombe, Bournemouth, Hants.*
 1943 † BROWN, E. S., B.A., *Hailey Lodge, Hertford Heath, Hertford.*
 1932 BROWN, Captain F. Martin, *Fountain Valley, Colorado Springs, Colo., U.S.A.*
 1919 † BROWN, J. M., B.Sc., *Carterknowle, Thorpe Lane, Robin Hood's Bay, Yorks.*
 1945 BROWN, J. Y., *Mosquito Control Officer, Medical Dept., Lagos, Nigeria, and 48, High-street, Odell, Beds.*

- 1910 BROWNE, H. B., M.A., *Woodleigh House, Aislaby, Whitby, Yorks.*
- 1930 BUCKNILL, The Rev. E. G., M.A., *St. Briavels, Lydney, Glos.*
- 1942 BUMSTEAD, R. P., 7, *Devonshire-road, Cambridge.*
- 1945 BURNARD, C. W., *Kitcombe Farm, Farrington, nr. Alton, Hants.*
- 1946 ‡ BURNETT, G. F., *International Red Locust Control Service, Abercorn, N. Rhodesia.*
- 1945 BURNETT, Lt.-Commndr. R., R.N.V.R., c/o *Westminster Bank Ltd., 300, King's-road, Chelsea, London, S.W. 3.*
- 1896†‡ BURR, Malcolm, D.Sc., F.G.S., A.R.S.M. (V.-PRES., 1912; COUNCIL, 1903-4, 1910-12), *P.K. 2198, Beyoglu, Istanbul, Turkey.*
- 1920 BURRAS, A. E., *Windyeats Farm, Redlynch, near Salisbury, Wilts.*
- 1933 ‡ BURTT, E., Ph.D., D.I.C., *Tsetse Research Dept., Old Shinyanga, Tanganyika Territory.*
- 1943 ‡ BURTT, E. T., Ph.D., *Dept. Zoology, The University, Bristol.*
- 1922 ‡ BUSHEY, L. C., *Zoological Society, Regent's Park, N.W. 8.*
- 1920 ‡ BUSHELL, Capt. H. S., *Ravensholt, Harrow-on-the-Hill.*
- 1943 BUSVINE, J. R., Ph.D., *Two Elms, Braywick-road, Maidenhead, Berks.*
- 1939 BUTLER, C. G., M.A., Ph.D., *Rothamsted Experimental Station, Harpenden, Herts.*
- 1937 ‡ BUXTON, D. R., 6, *Erskine-hill, Golders Green, London, N.W. 11.*
- 1912†‡ BUXTON, Prof. P. A., C.M.G., M.A., F.R.S. (PRESIDENT, 1942; V.-PRES., 1936, 1941, 1943; COUNCIL, 1926-8, 1935-7, 1943), *Grit Howe, Gerrard's Cross, Bucks.*
- 1946 BYTHELL, W. J. S., O.B.E., M.D., *Morville Hall, Bridgnorth, Salop.*
- 1933 ‡ BYTINSKI-SALZ, Dr. H., *Tel-Aviv Museum of Natural History, 16, Lasalle-street, Tel-Aviv, Palestine.*
- 1937 CALLAN, E. McC., B.Sc., A.R.C.S., D.I.C., Ph.D., *Dept. of Entomology, Imperial College of Tropical Agriculture, Trinidad, B.W.I.*
- 1945 ‡ CALLAWAY, S., *Beaufort, Ratfyn-road, Amesbury, Wilts.*
- 1917-1924, 1934 :
CAMERON, A. E., M.A., D.Sc., *Dept. of Entomology, University of Edinburgh, 10, George-square, Edinburgh 8.*
- 1932 ‡ CAMERON, E., Ph.D., D.Sc., *Carrow, 19, Southside-road, Inverness.*
- 1902 ‡ CAMERON, Commander Malcolm, M.B., R.N. (COUNCIL, 1919-20), 15, *Teesdale-road, Leytonstone, London, E. 11.*
- 1923 ‡ CAMERON, W. P. L., *Agricultural Research Service, Shambat, Khartoum, N. Sudan.*
- 1923 ‡ CAMPBELL-TAYLOR, J. E., *Belle Vue, Primrose Hill, Fairlight Cove, nr. Hastings, Sussex.*
- 1924 ‡ CARLIER, S. E. Wace, *Warwick Buildings, Warwick-road, Solihull, near Birmingham.*
- 1910†‡ CARPENTER, Prof. G. D. Hale, M.B.E., D.M. (PRESIDENT, 1945-6; V.-PRES., 1947; COUNCIL, 1934-6), *Hope Professor of Zoology (Entomology) in the University of Oxford, Penguelle, Hid's Copse-road, Cumnor Hill, Oxford.*
- 1912 CARTER, H. F., *The Office of Medical Entomologist, Torrington-square, Colombo, Ceylon.*
- 1934 CASTLE, Rev. A. R., *The Manse, 129, Old Tovil-road, Maidstone, Kent.*
- 1889†‡ CAVE, Charles J. P., *Stoner Hill, Petersfield, Hants.*

- 1914 ‡ CHAMPION, Prof. H. G., C.I.E., M.A. (COUNCIL, 1941-3), *Imperial Forestry Institute, Parks-road, Oxford.*
- 1936 CHAPMAN, K. H., M.A., B.Sc., *Zoological Dept., The University, Manchester.*
- 1938 CHARTRES, S. A., 9, *King's Drive, Eastbourne, Sussex.*
- 1945 ‡ CHATELAIN, R. G., 15, *Alley-n-park, West Dulwich, S.E. 21.*
- 1919 CHATTERJEE, N. C., D.Sc., *Forest Research Institute, Dehra Dun, U.P., India.*
- 1897 ‡ CHAWNER, Miss Ethel F., *The White House, Leckford, Stockbridge, Hants.*
- 1913 ‡ CHEAVIN, W. H. S., F.C.S., F.R.M.S., 19, *Rosendale-road, West Dulwich, London, S.E. 21.*
- 1920 ‡ CHEETHAM, C. A., *Austwick, via Lancaster.*
- 1942 ‡ CHINA, W. E., M.A., *British Museum (Natural History), Cromwell-road, London, S.W. 7.*
- 1933 CHORLEY, J. K., *Agricultural Laboratory, P.O. Box 387, Salisbury, S. Rhodesia.*
- 1935 CHORLEY, T. W., *The Medical Laboratories, P.O. Box 41, Kampala, Uganda.*
- 1933 ‡ CHRISTOPHERS, Col. Sir S. R., C.I.E., O.B.E., I.M.S., F.R.S., *Zoological Laboratory, The Museums, Cambridge.*
- 1945 CLARKE, Camden, *Lock House, Branston, Burton-on-Trent.*
- 1946 CLARKE, J. F. Gates, Ph.C., B.S., M.S., *Division of Insects, U.S. National Museum, Washington 25, D.C., U.S.A.*
- 1941 ‡ CLASSEY, Eric W., 5, *Carlton-avenue, Feltham, Middx.*
- 1935 ‡ CLAY, Miss Theresa, B.Sc., 18, *Kensington Park-gardens, London, W. 11.*
- 1914 ‡ CLEARE, L. D., Jr., *Dept. of Agriculture, Georgetown, British Guiana.*
- 1908 CLUTTERBUCK, C. Granville, *Heathside, 23, Heathville-road, Gloucester.*
- 1904 ‡ COCKAYNE, E. A., M.A., M.D., F.R.C.P. (PRESIDENT, 1943-4; V.-PRES., 1927, 1939; COUNCIL, 1915-17, 1926-8, 1939-41, 1945), *Merstone, Tring, Herts.*
- 1917 ‡ COCKERELL, Prof. T. D. A., *University of Colorado, Boulder, Colorado, U.S.A.*
- 1934 COGHILL, Dr. D., *Rathcoole, Stellenbosch, C.P., S. Africa.*
- 1944 COLHOUN, W. P., M.B., 5, *Pump-street, Londonderry, N. Ireland.*
- 1922 ‡ COLLENETTE, C. L., F.R.G.S. (V.-PRES., 1935; COUNCIL, 1934-6), 15, *Warren-avenue, Richmond, Surrey.*
- 1946 ‡ COLLIER, H. M., 11, *Greenbank-road, Darlington, Co. Durham.*
- 1899 ‡ COLLIN, James E. (PRESIDENT, 1927-8; V.-PRES., 1913, 1923, 1929; COUNCIL, 1904-6, 1913-15, 1923-5, 1929), *Raylands, Newmarket.*
- 1942 ‡ COLLINS, R. J., *Dept. of Entomology, British Museum (Natural History), Cromwell-road, S.W. 7.*
- 1946 ‡ COLYER, Capt. C. N., 8, *Canning Court, Newnham-road, London, N. 22.*
- 1918-1929, 1938 COMSTOCK, Dr. J. A., *Los Angeles Museum, Exposition Park, Los Angeles, California, U.S.A.*
- 1924*‡ COOKE, Brig.-Gen. B. H., C.M.G., C.B.E., D.S.O. (COUNCIL, 1936-8).
- 1946 COOPER, B. A., B.Sc., A.R.C.S., 27, *Spilsby-road, Boston, Lincs.*
- 1926 COOPER, Mrs. J. Omer, B.A., *Zoological Dept., Rhodes University College, Grahamstown, S. Africa.*
- 1943 COPE, J. E., *Ashes Bungalow, Mottram Old-road, Stalybridge, Cheshire.*
- 1933 ‡ CORBET, A. S., D.Sc., Ph.D., F.I.C. (V.-PRES., 1942; COUNCIL, 1941-3), 128, *Westwood-road, Tilehurst, Reading, Berks.*
- 1924 CORBETT, G. H., B.Sc., *Downings, 42, King's Stone Avenue, Steyning, Sussex.*
- 1921 ‡ CORPORAAL, J. B., *Zoological Museum, Zeeburgerdijk 21, Amsterdam.*

- 1920 † COTTERELL, G. S., A.R.C.S., 88, *Broad-street, Swindon, Wilts.*
 1945 COUCHMAN, Leonard E., 35, *Browne-street, West Hobart, Tasmania.*
 1945 COURT, T. H., *Oakleigh, Market Rasen, Lincs.*
 1943 COUSINS, R. J., A.C.P., F.Z.S., *High-street, Ashcott, nr. Bridgwater, Somerset.*
 1928 COVELL, Lt.-Col. G., C.I.E., M.D., D.P.H., D.T.M.H., I.M.S., *Director, Malaria Survey of India, Kasauli, Punjab, India.*
 1931 COWLAND, J. W., *Gezira Research Farm, Wad Medani, Sudan.*
 1931 † COWLEY, John, M.A., *Holywell House, Edington, Bridgwater, Somerset.*
 1937 † COWPER, J. D., c/o 18, *Girton House, Manor Fields, Putney Hill, London, S.W. 15.*
 1931 † COX, B. C.,
 1923 † COX, L. G., 1, *Chichester-terrace, Brighton 7.*
 1933 † COX, W. E., 279, *Albany-road, Cardiff.*
 1920 † CRABBE, E., 20, *Burcote-road, Wandsworth Common, London, S.W. 18.*
 1895 † CRABTREE, B. H., *Highfield, Trafford-road, Alderley Edge, Cheshire.*
 1935 † CRASKE, J. C. B., 33, *Hinchley Drive, Hinchley Wood, Esher, Surrey.*
 1946 † CRAUFURD, Clifford, *Denny, Galloway-road, Bishop's Stortford, Herts.*
 1946 CRAWFORD, H. G., *Department of Agriculture, Division of Entomology, Ottawa, Ontario, Canada.*
 1928 † CREWDSON, R. C. R., *The Grange, Delamere, Northwich, Cheshire.*
 1941 † CROWSON, R. A., B.Sc., A.R.C.S., D.I.C., 6, *Park-road, Southborough, Kent.*
 1919 † CUMMING, B. D., *Whistman's Wood, West Clandon, Surrey.*
 1946 † CURRIE, P. W. E., 102, *Burdon-lane, Belmont, Sutton, Surrey.*
 1946 CURTIS, A. E., *The Cottage, Ifold Estate, Loxwood, nr. Billingshurst, Sussex.*
 1908 † CURTIS, W. P., 70, *Princess-road, Bournemouth.*
- 1930 DAINTREE, A. C., *P.O. Box 292, Lourenço Marques, Portuguese East Africa.*
 1929 † DALTRY, H. W., *Bar Hill, Madeley, nr. Crewe.*
 1928 DAMPF, Dr. A., Professor of Entomology and Head of the Entomological Laboratory, "Leland Ossian Howard," *Escuela N. de Ciencias Biologicas, Apartado 2801, Mexico, D.F., Mexico.*
 1935 DANIEL, A. R., *College of Technology, Manchester 1.*
 1936 † DANNREUTHER, Capt. T., R.N., *Windycroft, High Wickham, Hastings, Sussex.*
 1944 DARLING, H. S., *Hoop Hill, Lurgan, N. Ireland.*
 1944 DARLOW, Surgeon-Lt. H. M., B.A., M.R.C.S., L.R.C.P., *Carr House, Glebe-road, Bedford.*
 1944 † DAVENPORT, Miss R. M., 1, *Ashburn-place, London, S.W. 7.*
 1939* DAVIDSON, D. M. N.
 1945 DAVIS, R. A., M.Sc., *The Schoolhouse, Pingewood, nr. Burghfield, Reading, Berks.*
 1903 DAY, F. H., *Blackwell Lodge West, Carlisle.*
 1934 † DENNE, Capt. R. A., *Pear Tree Farm, Hever, Kent.*
 1923 DEWAR, D. A., M.B., C.M., *Altyre House, Stanley S.O., Co. Durham.*
 1944 † DEWBERRY, E. B., *Clare, 16, Hamilton-close, Epsom, Surrey.*
 1930 † DIBB, J. R., 1, *Moorland-grove, Moor Allerton, Leeds 7.*
 1939 DICKER, G. H. L., *East Malling Research Station, near Maidstone, Kent.*
 1946 DICKINSON, K. Shallcross, M.R.C.S., L.R.C.P., Ph.C., *Arnold House, Arnold, Notts.*
 1943 † DIVER, Captain Cyril, C.B.E., *Rushmere Cottage, Frensham, Surrey.*
 1946 DOBSON, Ronald, 69, *Berkeley-street, Glasgow, C. 3.*

- 1909 † DOBSON, Thomas, 65, *Waddington-road, Clitheroe, Lancs.*
- 1946 DONALD, R. G., *West African Cocoa Research Institute, Tafo, Gold Coast.*
- 1943 † DONCASTER, J. P., B.A., *British Museum (Natural History), Cromwell-road, S.W. 7.*
- 1891 † DONISTHORPE, Horace St. John K., F.Z.S. (V.-PRES., 1911; COUNCIL, 1899–1901, 1910–12, 1931–3), 332, *Great West-road, Heston, Middx.*
- 1939 DOUBLEDAY, B. S., *Monks Risborough, Aylesbury, Bucks.*
- 1913 † DOW, Walter James, *Penang, Guildford-road, Great Bookham, Surrey.*
- 1943 DOWDESWELL, W. H., *Thornton House, Blundell's-avenue, Tiverton, Devon.*
- 1936 † DOWNES, A., *Dept. Zoology, The University, Glasgow.*
- 1935 † DOWSON, Major V. H. W., P.O.B. 9, *Basra, Iraq.*
- 1946 DUARTE, A. J., *Estação Agronomica Nacional, Sacavem, Portugal.*
- 1944 DU BOIS, Captain John J., 205, *Wayside-drive, Turlock, California, U.S.A.*
- 1943 † DUFFY, E. A. J., 28, *Lansdowne-road, East Croydon, Surrey.*
- 1938 DUN, G. S., *Colonial Sugar Refining Co. Ltd., Lautoka, Fiji.*
- 1945 DUNNING, Rev. J. M., O.C.F., 88, *Grove Park-road, Mottingham, S.E. 9.*
- 1921 DU PORTE, E. M., *Macdonald College, Quebec, Canada.*
- 1944 DYSON, R. C., 112, *Hollingbury Park Avenue, Brighton 6.*
- 1910 † EALES-WHITE, Maj. J. C., F.Z.S., 88, *Mt. Ararat-road, Richmond, Surrey.*
- 1924 EASTHAM, Prof. L., M.Sc., *Dept. of Zoology, The University, Sheffield 10.*
- 1940 † EASTON, A. M., M.B., B.S., M.R.C.S., L.R.C.P., *Roadside Cottage, Lower-road, Gt. Bookham, Surrey.*
- 1944 † EASTON, N. T., *Sulby Hall, Welford, nr. Rugby.*
- 1902 † EDELSTEN, H. M., O.B.E. (V.-PRES., 1928, 1937, 1938; COUNCIL, 1926–8, 1937–9), *Bramble Hill, Balcombe, Sussex.*
- 1945 EDNEY, E. B., Ph.D., D.I.C., B.Sc., *Zoology Dept., The University, Edgbaston, Birmingham 15.*
- 1924 † EDWARDS, W. H., *Dept. Agriculture, Kingston, Jamaica.*
- 1916 † EFFLATOUN BEY, Prof. H., *Dept. of Entomology, Faculty of Science, Fouad I University, Abbassia, Cairo, Egypt.*
- 1939 EIRISCH, F. K., *The Orchards, Verwood, Dorset.*
- 1946 † ELIOT, Lt.-Col. J. N., R.A., *Crawley Rise Lodge, Portsmouth-road, Camberley, Surrey.*
- 1924 ELLIS, E. T., F.R.H.S., 35, *Hoghton-street, Southport, Lancs.*
- 1944 ELLIS, G., *Blodfryn, Bryn Pydew, Llandudno Junction, N. Wales.*
- 1939 ELLISON, R. E., c/o *Foreign Office, London, S.W. 1.*
- 1927 ELLISTON-WRIGHT, F. R., M.D., *Braunton, N. Devon.*
- 1946 ELMHIRST, E. M., M.B., B.S., 28, *Hogarth-road, Earl's Court, London, S.W. 5.*
- 1925–1931, 1944 ELTON, C. S., M.A., *Bureau of Animal Population, 91, Banbury-road, Oxford.*
- 1927 † EMBRY, B., 23, *Mill Drove, Uckfield, Sussex.*
- 1945 EMPSON, D. W., *Dept. Entomology, N.A.A.S., 7, Redlands-road, Reading, Berks.*
- 1935 † EVANS, A. C., Ph.D., *Rothamsted Experimental Station, Harpenden, Herts.*
- 1945 † EVANS, E. C., 26, *Towncourt-crescent, Pett's Wood, Kent.*
- 1926 EVANS, Col. G. H., C.I.E., C.B.E., c/o *National Bank of India, Ltd., 26, Bishopsgate, London, E.C. 2.*
- 1928 † EVANS, J. W., M.A., D.Sc. (COUNCIL, 1945–), *Imperial Institute of Entomology, British Museum (Natural History), Cromwell-road, London, S.W. 7.*

- 1925 † FASSNIDGE, W., 4, *Bassett Crescent West, Southampton.*
- 1938 FAURE, Prof. J. C., *University of Pretoria, Pretoria, Union of S. Africa.*
- 1933 † FENNAH, R. G., B.A., *Imperial College of Tropical Agriculture, St. Augustine, Trinidad.*
- 1945 FENTON, G. R., *Forest Dept., Wellington, New Zealand.*
- 1918 † FERGUSSON, A., *Grangemount, Dunfermline, Fife.*
- 1938 † FERRIER, W. J., 86, *Portnalls-road, Coulsdon, Surrey.*
- 1939 FERRIERE, C., 45, *Florissant, Genève, Switzerland.*
- 1946 † FERRY, R. Stanton, *Fulling Mill House, Welwyn, Herts.*
- 1938 † FISHER, Lt. C. E., R.N.V.R., *City Museum, Park Row, Leeds 1.*
- 1931 † FISHER, Miss Katherine J. (Mrs. Richardson) (COUNCIL, 1937-8), *Rhodesia Court Hotel, South Kensington, S.W. 7.*
- 1898 † FLETCHER, Fleet Paymaster Thomas Bainbrigge, R.N., F.L.S., F.Z.S., *Rodborough Fort, Stroud, Glos.*
- 1944 † FLINT, J. H., A.L.A., 7, *Norfolk Mount, Leeds 7.*
- 1922 FLOWER, Miss A. B., *Castle Rings, Dudsbury, near Longham, Dorset.*
- 1924 † FORD, E. B., M.A., D.Sc., F.R.S. (V.-PRES., 1943; COUNCIL, 1942-4), *Dept. of Zoology and Comparative Anatomy, University Museum, Oxford.*
- 1946 † FORD, J., *Department of Tsetse Research, Shinyanga, Tanganyika Territory.*
- 1946 † FORD, J. H., *Hygienic Chemical Co., Ltd., 600, Commercial-road, London, E. 14.*
- 1941 † FORD, R. L. E., *Dunkeld, 51, Parkhill-road, Bexley, Kent.*
- 1932 † FORD, W. K., M.Sc., 73, *Queens-avenue, Meols, Wirral, Cheshire.*
- 1920 † FOX-WILSON, G. (V.-PRES., 1940, 1941, 1947; COUNCIL, 1935-7, 1940-2, 1946-), *Entomological Dept., R.H.S. Laboratory, Wisley, Ripley, Surrey.*
- 1908 † FRASER, F. C., Lt.-Col., M.D., I.M.S., *Mercara, Glenferness-avenue, Winton, Bournemouth, Hants.*
- 1943 † FREEMAN, J. A., Ph.D., *Ministry of Food Infestation Branch, 58, High Holborn, London, W.C. 1, and Lord Roberts Hut, Bisley Camp, Brookwood, Woking, Surrey.*
- 1938 † FREEMAN, Paul, *Meadowbank, Priest's-lane, Shenfield, Essex.*
- 1937 † FREEMAN, R. B., *Bureau of Animal Population, University Museum, Oxford.*
- 1888 † FREMLIN, H. Stuart, M.R.C.S., L.R.C.P., *Heavers, Ryarsh, nr. West Malling, Kent.*
- 1946 † FRESHFIELD, G. P., 32, *Hallam-road, Clevedon, Somerset.*
- 1945 FRIEDLEIN, A. F. E., c/o *F. Friedlein & Co. Ltd., 90, Minories, E.C. 3.*
- 1907 † FRYER, Sir John C. F., O.B.E., M.A. (PRES., 1938-9; V.-PRES., 1927, 1937, 1940; COUNCIL, 1916-18, 1925-7, 1937, 1940), *Agricultural Research Council, 6a, Dean's Yard, S.W. 1.*
- 1930 † GABRIEL, A. G. (COUNCIL, 1942-4), *Wilfadene, King's End, Ruislip, Middx.*
- 1945 GALBRAITH, Dr. C. J., 29, *Union-road, Exeter, Devon.*
- 1941 GALBRAITH, W. A., M.B., Ch.B., *Curatehill, Law, Carlisle, Lanarkshire.*
- 1939 GAMBLE, I. R., 3, *Ashcroft-gardens, Eastfield-road, Peterborough.*
- 1936 † GAMBLES, R. M., *Veterinary Laboratory, Nicosia, Cyprus.*
- 1920 GARDNER, J. C. M., C.I.E., *Forest Research Institute, Dehra Dun, U.P., India.*
- 1901 † GARDNER, Wiloughby, D.Sc., F.L.S., F.S.A., *Y Berlfa, Deganwy, N. Wales.*
- 1946 GAUL, A. T., B.S., 401, *Washington-avenue, Brooklyn 5, N.Y., U.S.A.*
- 1945 GAUNTLETT, S. R., *Woodgreen, Fordingbridge, Hants.*
- 1919 † GEDYE, A. F. J., *P.O. Box 216, Nairobi, Kenya Colony.*

- 1923 * GEE, G. F.
 1936 GHESQUIÈRE, Dr. J., 87, *Avenue du Castel, Brussels, Belgium.*
 1922 ‡ GHOSH, C. C., B.A., *Bhogla, Mirzapur, Kundi and Sardong Agricultural Farms, Balasore District, Orissa, India.*
 1933 ‡ GILLETT, J. D., 72, *Gayton-road, Harrow, Middx.*
 1904 ‡ GILLIAT, Francis T., B.A., 25, *Manor-road, Folkestone, Kent.*
 1946 GILMOUR, E. Forrest, *East View, Milnsbridge, Huddersfield, Yorks.*
 1919 ‡ GIMINGHAM, C. T., O.B.E., F.I.C. (COUNCIL, 1942-4), *Ministry of Agriculture, Pathological Laboratory, Milton-road, Harpenden, Herts.*
 1930 ‡ GLEGG, D. Lindsay, *Birchstone, Coombe Park, Kingston, Surrey.*
 1933 GLENNIE, Brigadier E. A., C.I.E., R.E., 99a, *Cross Oak-road, Berkhamsted, Herts.*
 1945 ‡ GODDARD, T. D., *Long Hoyle Farm, Heyshott, Midhurst, Sussex*, and 9, *College-road, London, S.E. 21.*
 1946 GOFFE, Capt. E. Rivenhall, *Winton Cottage, King's Somborne, Hants.*
 1924 GOLDING, F. D., *Moor Plantation, Ibadan, S. Provinces, Nigeria.*
 1935 ‡ GOLLEDGE, C. J., 146, *Holland-road, London, W. 14.*
 1937 ‡ GOODLIFFE, E. R., B.A., *Penarth, 7, Lyonsdown-avenue, New Barnet, Herts.*
 1943 GOODLIFFE, F. D., M.A., *Lord Wandsworth College, Long Sutton, Basingstoke, Hants.*
 1925 ‡ GORDON, D. J., B.A., *The Manor House, Strathpeffer, N.B.*
 1941 GORDON, Prof. R. M., O.B.E., M.D., Sc.D., M.R.C.P., *School of Tropical Medicine, Pembroke-place, Liverpool 3.*
 1945 GRACIE, W. McAuley, M.B.E., *Ministry of Food, Gower-street, London, W.C. 1.*
 1943 GRAHAM, M. W. R. de Vere, c/o Mrs. Graham, *Salmonby Rectory, Horncastle, Lincs.*
 1927 GRANDI, Prof. Dr. Guido, *Istituto di Entomologia, Università degli Studi, Via Filippo Re 6, Bologna 125, Italy.*
 1924 GRANT, J. H., 74, *Colehill-road, Ward End, Birmingham.*
 1911 ‡ GRAVES, P. P., *Ballylichey House, Bantry, Co. Cork, Ireland.*
 1942 GRAY, W. J., *Veterinary Department, Mzimba, Nyasaland.*
 1891†‡ GREEN, E. Ernest, F.Z.S. (PRES., 1923-4; V.-PRES., 1915, 1925; COUNCIL, 1914-16, 1925), *Way's End, Beech-avenue, Camberley.*
 1945 ‡ GREEN, R. A., *Caddington Hall, Markyate, nr. St. Albans, Herts.*
 1943 GREEN, T. L., B.Sc., 45, *Bedford-road, Firswood, Manchester 16.*
 1936 ‡ GREENSLADE, R. M. (COUNCIL, 1946-), 100, *Windsor-road, Cambridge.*
 1933 ‡ GREENWOOD, Lt.-Col. J. A. C., *Post Box 557, 21, Ravelin-street, Bombay, India.*
 1931 ‡ GREGSON, Col. G. K., D.S.O., *Lye Green House, Withyham, Sussex.*
 1928 ‡ GRENSTED, The Rev. Prof. L. W., M.A., D.D., *Oriel College, Oxford.*
 1946 GRIFFIN, Francis J., A.L.A., 29, *Bushy Park-gardens, Teddington, Middx.*
 1905 GRIST, Charles J., 98, *Sharmans Cross-road, Solihull, nr. Birmingham.*
 1946 GRIVEAU, M. P., *Pleine-Fougères, Ille-et-Vilaine, France.*
 1937 GROVE, L. R. A., B.A., 131, *Harbour-road, Wibsey, Bradford, Yorks.*
 1946 ‡ GRUNDY, J. H., *Pendleton House, 41, Villiers-road, Southall, Middx.*
 1942 ‡ GUNN, D. L., D.Sc., Ph.D., F.Z.S., *Anti-Locust Research Centre, British Museum (Natural History), London, S.W. 7.*
 1920 ‡ GUNTON, Major H. C., M.B.E., *Rathgar, Milton-avenue, Gerrard's Cross, Bucks.*
 1912 HACKER, Henry, *Queensland Museum, Brisbane, Queensland.*

- 1944 ‡ HADAWAY, A. B., *c/o Director of Medical Services, Entebbe, Uganda.*
 1940 ‡ HADDOW, A. J., *Yellow Fever Research Institute, Entebbe, Uganda.*
 1946 ‡ HADJINICOLAOU, J., M.Sc., *School of Hygiene, Alexandria-avenue 1 and 6, Athens, Greece.*
 1919 HADWEN, Dr. Seymour, D.Vet.Sci., 5, *Foxbar-road, Toronto, Canada.*
 1945 HAFEZ, M., Ph.D., *Zoological Laboratory (Entomology), Downing-street, Cambridge.*
 1925 ‡ HAIG-THOMAS, P., *The Rookery, Braemore, Fordingbridge, Hants.*
 1943 HALFPENNY, A. E., *The Grand Hotel, Eastbourne, Sussex.*
 1906 ‡ HALL, Arthur, 3, *Kingsleigh, 1, Chichester-road, East Croydon, Surrey.*
 1934 ‡ HALL, R. E., B.Sc., *The Stacks, Mark Cross, nr. Tunbridge Wells, Kent.*
 1921 ‡ HALL, W. J., M.C., D.Sc. (V.-PRES., 1946; COUNCIL, 1944-6), *Imperial Institute of Entomology, 41, Queen's Gate, London, S.W. 7.*
 1912 ‡ HALLETT, H. M., *Forest Edge, Lea Bailey, Ross-on-Wye, Hereford.*
 1934 ‡ HAMILTON, A. G., B.Sc., B.Agr., Ph.D., D.I.C., *Department of Biology, Royal Veterinary College, Royal College-street, London, N.W. 1.*
 1915 ‡ HAMM, Albert Harry, M.A., A.L.S., 22, *Southfield-road, Oxford.*
 1928 ‡ HAMMOND, C. O., 34, *Passmore Gardens, New Southgate, London, N. 11.*
 1945 ‡ HAMMOND, H. E., 16, *Elton-grove, Birmingham 27.*
 1944 ‡ HANCOCK, J. W., *Sunninglye Farm, Pembury, Kent.*
 1946 HANDFIELD-JONES, R. M., M.C., M.S., F.R.C.S., 149, *Harley-street, London, W. 1.*
 1929 ‡ HANSON, H. S., *c/o Forestry Commission, 25, Saville-row, London, W. 1.*
 1944 ‡ HARDS, C. H., 40, *Riverdale-road, Plumstead, London, S.E. 18.*
 1930-36, 1942, HARDWICKE, S. M. B., *Friarmayne, near Dorchester, Dorset.*
 1933 ‡ HARDY, Dr. J. E., *Asiatic Petroleum Co. Ltd., Technical Products Dept., St. Helen's-court, Great St. Helen's, E.C. 3.*
 1903 ‡ HARE, E. J., *Harrow Place, Pinden, Dartford, Kent.*
 1920 ‡ HARGREAVES, E., *Briercliff, George-lane, Read, nr. Burnley, Lancs.*
 1920 HARGREAVES, H., 11, *Malbrook-road, London, S.W. 15.*
 1926 HARMSWORTH, Sir H. A. B.
 1946 ‡ HARPER, Commander G. W., R.N., *Bramblewood, Bushby-avenue, Rustington, Sussex.*
 1946 ‡ HARPER, R. T., 168, *Salmon-street, Kingsbury, London, N.W. 9.*
 1946 HARRIS, J. R., 3, *Connaught-place, Clonskeagh, Dublin.*
 1928 HARRIS, W. V., M.Sc., *Entomologist, Agricultural Research Station, P.O. Box 265, Kampala, Uganda.*
 1946 HARRISON, G. S., F.R.G.S., *New House, High Harrogate College, 98, Franklin-road, Harrogate.*
 1942 ‡ HARRISON, Major J. L., B.Sc., R.A.S.C., 93A, *High Street, Wimbledon, London, S.W. 19.*
 1910 ‡ HARWOOD, Philip, *Granish Cottage, Aviemore, Inverness.*
 1919 ‡ HAWKER-SMITH, W., *Malt House Farm, Hambledon, Godalming, Surrey.*
 1927 ‡ HAWKINS, C. N. (COUNCIL, 1938-40), 23, *Wilton-crescent, Wimbledon, London, S.W. 19.*
 1913 ‡ HAWKSHAW, Oliver, *Chisenbury Priory, Marlborough, Wilts.*
 1946 HAWLEY, Lt.-Col. W. G. B., D.S.O., *Amber Cottage, Bodenham, nr. Salisbury, Wilts.*
 1944 HAYES, G. D., *Naminkurya Estate, Limbe P.O., Nyasaland.*
 1944 HAYHURST, H., *Fouray, Parkfield Road, Didsbury, Manchester 20.*

- 1921 ‡ HAYWARD, Capt. K. J., F.R.G.S., *Instituto Miguel Lillo, Calle Miguel Lillo, 205, Tucuman, Argentine.*
- 1936 HEARNshaw, Mrs. G. R., B.Sc., Ph.D., c/o L. S. Hearnshaw, Esq., *Psychology Department, Victoria University, Wellington, New Zealand.*
- 1945 HEATH, J., *Heathcot, Hedge End, Southampton.*
- 1929-33; 1944 ‡ HEBBERT, Major G. K. P., c/o Messrs. Grindlay & Co., *Bombay, India.*
- 1945 HEBDEN, A., 5, *Manston Terrace, Crossgates, Leeds.*
- 1943 ‡ HEDGCOCK, S. W., 3, *Purley-rise, Purley, Surrey.*
- 1910 ‡ HEDGES, Alfred V., *Ballavale, Santon, Isle of Man.*
- 1919 ‡ HEMMING, Francis, C.M.G., C.B.E. (V.-PRES., 1939, 1944, 1945; TREASURER, 1929-38; COUNCIL, 1928, 1939, 1944-6), 83, *Fellowes-road, (Garden Flat), Hampstead, London, N.W. 3.*
- 1936 HENRY, G. M., *The Baptist Manse, Chadlington, Oxon.*
- 1943 HENSON, Dr. H., 39, *Jackson-avenue, Roundhay, Leeds 8.*
- 1918 HERROD-HEMPSALL, J., *Sternthorpe, 269, Stockingstone-road, Old Bedford-road, Luton, Beds.*
- 1903 HERROD-HEMPSALL, W., *Hame, 18, Delcroft Way, Harpenden, Herts.*
- 1929 ‡ HESLOP, Ian R. P., M.A., c/o Griffiths McAlister, 10, *Warwick-street, W. 1.*
- 1925 HESSE, Dr. A. J., *South African Museum, Cape Town, S. Africa.*
- 1913 HEWITT, John, B.A., Director, *Albany Museum, Grahamstown, S. Africa.*
- 1941 ‡ HEWLETT, Paul S., *Squire's Cottage, Crawley Down, Sussex.*
- 1946 HEWSON, Frank, 23, *Thornhill-drive, Gaisby-lane, Shipley, Yorks.*
- 1939 ‡ HICK, P., F.Z.S., *Athol House, Fulford-road, Scarborough, Yorks.*
- 1941 ‡ HICKIN, N. E., Ph.D., *Plummers, Bletchingley, nr. Redhill, Surrey.*
- 1922 ‡ HIGGINS, L. G., M.A., F.R.C.S. (COUNCIL, 1936-8), *Linkwood, Woking, Surrey.*
- 1943 HILL, A. R., B.Sc., 58, *Abbotsford-street, Dundee, Scotland.*
- 1930 ‡ HINCKS, W. D., M.P.S., 46, *Gipton Wood-avenue, Leeds 8.*
- 1936 HINDLE, Prof. E., F.R.S., *Scientific Director, The Zoological Society of London, Regent's Park, London, N.W. 8.*
- 1934 HINGORANI, R. U., M.B., B.S., L.M., 117A, *Harley-street, London, W. 1.*
- 1924 ‡ HINGSTON, Major R. W. G., M.C. (COUNCIL, 1931-3), *Horsehead, Passage West, County Cork, Ireland.*
- 1934 ‡ HINTON, H. E., B.Sc., Ph.D. (COUNCIL, 1944-6), *British Museum (Natural History), S. Kensington, London, S.W. 7.*
- 1946 HLISNIKOWSKI, J., *Sokolská 5, Moravska Ostrava, Czechoslovakia.*
- 1929 ‡ HOBBS, B. M., M.A., D.Phil. (COUNCIL, 1937-9), 7, *Thorncliffe-road, Oxford.*
- 1944 ‡ HOCKEN, Miss Marion G., *Caravan, Tyringham-road, Lelant, Cornwall.*
- 1943 HOCKEN, Melville, M.B., B.Sc., 8, *Tremena-road, St. Austell, Cornwall.*
- 1935 ‡ HODGKIN, E. P., 6, *Prince's-street, S. Cottesloe, W. Australia.*
- 1946 HOFFMEYER, Dr. Skat, 36, *Fredensgade, Aarhus, Denmark.*
- 1922 HOGARTH, A. Moore, F.C.I.S., 143, *Golders Green-road, London, N.W. 11.*
- 1937 ‡ HOLBORN, J. M., 5, *Bewlys-road, London, S.E. 27.*
- 1922 ‡ HOPKINS, G. H. E., *Stonycroft, Burton, Westmorland, via Carnforth, Lancs.*
- 1919 DE HORRACK-FOURNIER, Mme., 90, *Boulevard Malesherbes, Paris, and Château de Voisins, Louveciennes, Seine-et-Oise, France.*
- 1943 ‡ HOWARTH, Mrs. E. W., 2, *Abney-road, Heaton Chapel, Stockport, Cheshire.*
- 1939 HOWARTH, T. G., B.E.M., 66, *St. John's-road, Sevenoaks, Kent.*

- 1946 HOWE, F. J., *Pathological Department, Hospital of St. Cross, Rugby, Warwick-shire.*
- 1940 ‡ HOWE, R. W., *Pest Infestation Laboratory, London-road, Slough, Bucks.*
- 1946 HUDSON, E. J., 129, *City-road, Birmingham 16.*
- 1946 HUDSON, MRS. G. B., *c/o Zoology Department, Rhodes University College, Grahamstown, S. Africa.*
- 1936 HUGGINS, H. C., 875, *London-road, Westcliff-on-Sea, Essex.*
- 1907 HUGHES, C. N., 101, *Carrington House, Hertford-street, London, W. 1.*
- 1934 ‡ HULLS, L. G., *Chemistry Branch, Military College of Science, Shrivenham, nr. Swindon, Wilts.*
- 1921 HUNT, The Rev. J. Wesley, *Indaleni High School, Indaleni, Natal, S. Africa.*
- 1944 HUSSEY, N. W., *Penwarne, Stonewall Park-road, Langton, Tunbridge Wells, Kent.*
- 1922 ‡ HUTCHINSON, G. E., M.A., F.L.S., *Osborn Zoological Laboratory, Yale University, New Haven, Conn., U.S.A.*
- 1935 HYDE, G. E., 20, *Woodhouse-road, Doncaster.*
- 1939 ‡ HYNES, H. B. Noel, *Dept. of Zoology, The University, Liverpool.*
- 1927 ‡ JACKSON, C. H. N., D.Sc., Ph.D., *Dept. of Tsetse Research, Tabora, Tanganyika Territory.*
- 1917 ‡ JACKSON, Miss Dorothy J., *North Cliff, St. Andrews, Fife.*
- 1941 ‡ JACKSON, Capt. R. A., R.N. (COUNCIL, 1946-), *The Hermitage, Bishop's Waltham, Hants.*
- 1932 ‡ JACKSON, T. H. E., *Kapretwa, Kitale, Kenya Colony.*
- 1938 JACOT-GUILLARMOD, C. F., M.Sc., *Mamathes, via Teyateyaneng, Basutoland, S. Africa.*
- 1938 JACZEWSKI, Dr. T. A. F., *Polish Museum of Zoology, ul Wilcza 64, Warsaw, Poland.*
- 1914 ‡ JANSE, Prof. A. J. T., D.Sc., 541, *Adcock-street, Gezina, Pretoria, S. Africa.*
- 1940 JANSON, H. W., *The Homestead, Shakespeare-road, Mill Hill, N.W. 7.*
- 1898 JANSON, Oliver J., 46, *Beresford-road, Hornsey, London, N. 8.*
- 1933 JANSON, R. B., 44, *Great Russell-street, W.C. 1.*
- 1937 JAYEWICKREME, S. H., Ph.D., D.I.C., *Medical Laboratories, Torrington-square, Colombo, Ceylon.*
- 1932 JEANNEL, Dr. R., *Muséum national d'Histoire naturelle, Rue de Buffon, Paris, Ve.*
- 1943 JEFFEREY, Mrs. Violet G., F.R.H.S., *Rozel, Bilton Hill, Rugby.*
- 1933 ‡ JOBLING, B., *Wellcome Entomological Field Laboratories, Claremont, Esher, Surrey.*
- 1937 JOHNPULE, A. L., *Agricultural Officer, Tangalle, Ceylon.*
- 1924 ‡ JOHNSTON, H. B., M.A., 5, *Scroope-terrace, Cambridge.*
- 1933 JOHNSTONE, R. F., *c/o Lloyds Bank Ltd., Cox's & King's Branch, 6, Pall Mall, S.W. 1.*
- 1946 JONES, Lieut. B. M., R.N.V.R., *Dept. Zoology, University of Edinburgh, West Mains-road, Edinburgh 9.*
- 1930 ‡ JONES, E. Parry, B.Sc., Ph.D., *c/o Pest Control (Central Africa), Ltd., P.O. Avondale, Salisbury, S. Rhodesia.*
- 1924 ‡ JONES, F. Morton, D.Sc., 2000, *Riverview-avenue, Wilmington, Delaware, U.S.A.*
- 1938 JONES, H. E. W., *Lyndhurst, Hoole-road, Chester.*

- 1925 ‡ JONES, J. R. J. LL., M.A., *Arranmore, Mill Bay, Cobble Hill, British Columbia.*
 1910 ‡ JOSEPH, E. G., M.C., M.A., B.Sc., *Redcot, Swanley, Kent.*
- 1945 ‡ KAPUR, A. P., *c/o Imperial Institute of Entomology, 41, Queen's Gate, S.W. 7.*
 1896†‡ KAYE, W. J. (COUNCIL, 1906-8), *Chantry Lodge, Longdown, Guildford, Surrey.*
 1925 KEARNS, H. G. H., B.Sc., Ph.D., *The Research Station, Long Ashton, nr. Bristol.*
 1940 KEMNER, Dr. N., *K. Universitets-Biblioteket, Lund, Sweden.*
 1938 KENDALL, Mrs. M. W.
 1926 KENNEDY, Prof. C. H., *Ohio State University, Columbus, Ohio, U.S.A.*
 1945 ‡ KENNEDY, John S., Ph.D., *Agricultural Research Council, Unit of Insect Physiology, Dept. Zoology, Downing-street, Cambridge.*
 1929 KENWAY, H. C., 179, *Brook-street, Brooklyn, Pretoria, S. Africa.*
 1934 ‡ KERRICH, G. J., M.A., *University Museum, Manchester 13.*
 1936 KERSEY, R. H., *Mandelieu, Cooden, Bexhill-on-Sea, Sussex.*
 1946 ‡ KETTLE, D. S., 11, *Hillside-gardens, Berkhamsted, Herts.*
 1942 ‡ KETTLEWELL, H. B. D., M.A., M.B., B.Chir., M.R.C.S., L.R.C.P., *Homefield, Cranleigh, Surrey.*
 1942 KEVAN, D. K. McE., B.Sc., *Imperial College of Tropical Agriculture, St. Augustine, Trinidad, B.W.I.*
 1946 ‡ KHALSA, H. G., M.Sc., *Zoology Department, The University, Leeds 2.*
 1925 KILLINGTON, F. J., D.Sc., A.L.S., *Durlston, Kimberley-road, Parkstone, Dorset.*
 1917 ‡ KIRKPATRICK, T. W., *Imperial College of Tropical Agriculture, St. Augustine, Trinidad, B.W.I.*
 1938 ‡ KLOET, G. S., *Vanessa, Knutsford-road, Wilmslow, Cheshire.*
 1943 KNIGHT, Major Maxwell.
 1940 KRISHNAMURTI, B., *Entomological Section, Dept. Agriculture in Mysore, Bangalore, India.*
- 1927 ‡ LABOUCHERE, Col. F. A. (COUNCIL, 1939-41), 15, *Draycott-avenue, Sloane Square, London, S.W. 3.*
 1922 ‡ LACEY, Lionel, 485, *Pelham-road, New Rochelle, N.Y., U.S.A.*
 1925 LAIDLAW, F. F., M.R.C.S., L.R.C.P., *Eastfield, Uffculme, Devon.*
 1910 ‡ LAKIN, C. Ernest, M.D., F.R.C.S., 58, *Portland-place, London, W. 1.*
 1911†‡ LAMBORN, W. A., O.B.E., M.R.C.S., L.R.C.P., *Fort Johnston, Nyasaland.*
 1946 LATHAM, F. H., 26, *Hollie Lucas-road, King's Heath, Birmingham 14.*
 1927 ‡ LAWSON, H. B.
 1930 LAWSON, J. A., *Greenacre, Forest Row, Sussex.*
 1946 LAWSON, J. W. H., *Zoology Dept., The University, Glasgow, W. 2.*
 1939 LEA, Lt. H. A. F., *c/o Director of Locust Research, University of Pretoria, Pretoria, S. Africa.*
 1923 ‡ LEAN, O. B., *Hawthorndale Laboratories, Jealott's Hill Research Station, Bracknell, Berks.*
 1945 ‡ LECLERCQ, J., *Institut Léon Frédéricq, 17, Place Delcour, Liège, Belgium.*
 1930 ‡ LEESON, H. S., 39, *Dawlish-drive, Pinner, Middx.*
 1934 LEGGE, Miss C. M., M.A., A.R.C.A., 12, *Brooklands Avenue, Withington, Manchester, 20.*
 1927 LEIVERS, A. R., 20, *Warwick-road, Mapperley Park, Nottingham.*
 1924 ‡ LE PELLEY, R. H., Ph.D., *Department of Agriculture, Box 338, Nairobi, Kenya.*

- 1938 ‡ LETTS, A. W., *Lansdowne, 74, Brighton-road, Sutton, Surrey.*
- 1938 ‡ LETTS, G. A., *Lansdowne, 74, Brighton-road, Sutton, Surrey.*
- 1930 ‡ LEVER, R. J. A. W., B.Sc., D.I.C., A.I.C.T.A., F.L.S., *Dept. Agriculture, Kuala Lumpur, Malaya.*
- 1931 ‡ LEWIS, D. J., *Agricultural Research Service, Wad Medani, Sudan.*
- 1938 LEWIS, E. A., *c/o Veterinary Research Laboratory, Kabete, Kenya Colony.*
- 1908 † LEWIS, John Spedan, F.Z.S., 35, *Cavendish-square, London, W. 1.*
- 1938 LINSSEN, E. F., 2, *Albany Park-road, Kingston-on-Thames, Surrey.*
- 1930 LISNEY, A. A., M.A., M.B., D.P.H., *The Red House, Narborough, Leicestershire.*
- 1946 LIEU, Prof. K. O. Victoria, No. 3, *Passage 84, Rue Maresca, Shanghai, China.*
- 1937 LIU, Dr. Chung Lo, *Division of Entomology, Institute of Agricultural Research, National Tsing Hua University, Kunming, Yunnan, China.*
- 1938 LIVERA, P. H. F. de, L.M.S., D.P.H., D.T.M., 13, *Park Lane, Lahore, India.*
- 1946 ‡ LLOYD, Major C. T., D.Sc., Ph.D., 25, *Belmont-avenue, New Malden, Surrey.*
- 1934 ‡ LLOYD, H. M., *Shinyanga, Tanganyika Territory.*
- 1919 ‡ LLOYD, Llewellyn, D.Sc., *Zoological Dept., The University, Leeds.*
- 1933 ‡ LLOYD, O. C., M.A., M.B., B.Chir., M.R.C.S., L.R.C.P., *Central Research Institute, Kasauli, Punjab, India.*
- 1946 LLOYD, T. A., *The Red House, Westwood-road, Ryde, Isle of Wight.*
- 1946 LODEIZEN, J. A. F., *Schönweg 102, Wassenaar, Holland.*
- 1920 ‡ LODGE, George, *Hawkhouse, Upper Park-road, Camberley.*
- 1946 ‡ LOVELL, R., 27, *Athenaeum-road, Whetstone, London, N. 20.*
- 1925 ‡ LONGFIELD, Miss C. (V.-PRES., 1947; COUNCIL, 1932-4, 1946-), 11, *Ivernagardens, W. 8.*
- 1923 LOWTHER, R. C., M.B., Ch.B., *Fernleigh, Grange-over-Sands, Lancs.*
- 1936 ‡ LOYNES, N., *Wichenford, Worcester.*
- 1946 ‡ LUMSDEN, W. H. R., B.Sc., Ch.B., *London School of Hygiene and Tropical Medicine, Keppel-street, London, W.C. 1.*
- 1937 MACAN, Major T. T., R.A.M.C., *Stevney, Outgate, Ambleside, Cumberland.*
- 1944 MCCLUGGAGE, E. R. B., *Flowerfield, Lisburn, Co. Antrim.*
- 1910 ‡ MACDOUGALL, R. Stewart, M.A., LL.D., D.Sc., F.R.S.E. (V.-PRES., 1929; COUNCIL, 1928-30, 1935), *Ivy Lodge, Gullane, East Lothian.*
- 1936 ‡ MACFIE, J. W. S., M.A., D.Sc., M.B., Ch.B., 42, *Filsham-road, St. Leonard's-on-Sea, Sussex.*
- 1944 MCGARVEY, John, M.B., B.Ch., *Westfield, Wells, Somerset.*
- 1930 MCHARDY, J. W., B.Sc., 53, *Liberton-drive, Edinburgh.*
- 1928 ‡ MCKENNY-HUGHES, Major A. W., R.A.M.C., D.I.C. (V.-PRES., 1937; SECRETARY, 1934-6; COUNCIL, 1937), *British Museum (Natural History), Cromwell-road, London, S.W. 7.*
- 1929 ‡ MACLAGAN, D. Stewart, Ph.D., D.Sc., F.R.S.E., *The Zoological Dept., West of Scotland Agricultural College, Blythswood-square, Glasgow, C. 2.*
- 1936 ‡ MACLEOD, J., D.Sc., Ph.D., *Cooper Field Research Station, Little Gaddesden, Herts.*
- 1919 MCLEOD, Sir Murdoch, Bt., *Culverlea House, Pennington, Lymington, Hants.*
- 1940 MACPHERSON, J. G., *Fairstead, Gt. Warley, Brentwood, Essex.*
- 1946 MAINA, Capt. Barth A., 10623, *Church-street, Chicago 43, Illinois, U.S.A.*
- 1892 ‡ MANSBRIDGE, W., M.Sc., *Monreith, Derby-road, Formby, Liverpool.*
- 1937 MANSKI, M. J., *c/o P.O., Maryborough, Queensland, Australia.*

- 1942 MARSDEN-JONES, Eric M., F.L.S., *Close Cottage, Littleton Panell, Devizes, Wilts.*
- 1895 ‡ MARSHALL, Sir Guy A. K., K.C.M.G., D.Sc., F.R.S., F.Z.S. (V.-PRES., 1919, 1924, 1932; COUNCIL, 1907-8, 1919-21, 1924-6, 1928-30, 1932-4, 1938-40, 1945-), 31, *Melton Court, Onslow Crescent, London, S.W. 7.*
- 1935 MARSHALL, J., *Blackwood, Tweedie, Natal, S. Africa.*
- 1922 MARSHALL, J. F., C.B.E., M.A., F.Z.S., *Seacourt, Hayling Island, Hants.*
- 1896 MARSHALL, P., M.A., B.Sc., F.G.S., *Hautere, Bellevue-road, Lower Hutt, New Zealand.*
- 1945 MARSON, J. E., 35, *High Park-drive, Hexton, Bradford, Yorks.*
- 1922 ‡ MASSEE, A. M., D.Sc. (COUNCIL, 1939-41), *East Malling Research Station, East Malling, Kent.*
- 1937 MASSY, Miss N. C., *c/o Educational Museum, Haslemere, Surrey.*
- 1938 MATHESON, C., M.A., B.Sc., *National Museum of Wales, Cardiff.*
- 1942 ‡ MATTINGLEY, Lieut. P. F., R.A.M.C., *The Cross House, Tewkesbury, Glos.*
- 1912 MAULIK, Prof. S., M.A., *c/o R. Maulik, Clock Tower, Hogg Market, Calcutta, India.*
- 1946 MEIKLE, Miss Agnes A., B.Sc., *c/o 184, Nithsdale-road, Glasgow, S. 1.*
- 1929 ‡ DE MEILLON, Botha, *South African Institute for Medical Research, Box 1038, Johannesburg, S. Africa.*
- 1933 ‡ MELLANBY, K., M.A., Ph.D., *London School of Hygiene & Tropical Medicine, Keppel-street, W.C. 1.*
- 1946 MELLERS, W., *School House, Bodenham, Hereford.*
- 1927 MELLOR, J. E. M., M.A., *The Prospect Cottage, Bredwardine, Herefordshire.*
- 1912 ‡ METCALFE, Rev. J. W., *Holmbank, Westcott, Surrey.*
- 1926 ‡ MICHELMORE, A. P. G., *Saffron Close, Chudleigh, S. Devon.*
- 1935 MICKEL, Prof. C. E., Ph.D., *Division of Entomology, Dept. of Agriculture, University of Minnesota, St. Paul, Minn., U.S.A.*
- 1945 MILES, P. M., 107, *Victoria-road, Summerton, Oxford.*
- 1920 ‡ MILLER, D., Ph.D., Chief of Dept. of Entomology, *The Cawthron Institute, Nelson, New Zealand.*
- 1946 MILLER, L. W., M.Agr.Sci., *Dept. Agriculture, Hobart, Tasmania.*
- 1921 MILLER, N. C. E., *High Trees, P.O. Odzi, S. Rhodesia.*
- 1930 MISRA, Dr. A. B., *Hindu University, Benares, India.*
- 1934 MITCHELL, B. L., *Veterinary Department, Blantyre, Nyasaland.*
- 1944 MOLLISON, P. W., *Pest Control Ltd., Kelvedon, Colchester, Essex.*
- 1946 MOORE, B. P., 81, *Burnham-way, West Ealing, London, W. 13.*
- 1937 MOORE, George A., *Lyman Entomological Room, Redpath Museum, McGill University, Montreal, Canada.*
- 1899 ‡ MOORE, Harry, 9, *Hoopwick-street, Deptford, S.E. 8.*
- 1927 MOORE, H. W. B., 153-15, *109th Road, Jamaica, L.I.; New York, U.S.A.*
- 1922 MOORE, J. W., 151, *Middleton Hall-road, King's Norton, Birmingham.*
- 1946 MORGAN, Mrs. M. J., B.Sc., 1, *Whitegate-drive, Siddall, Halifax, Yorks.*
- 1923 ‡ MORISON, G. D., B.Sc., Ph.D., *Entomological Dept., Marischal College, Aberdeen.*
- 1945 ‡ MORLEY, A. M., 9, *Radnor Park West, Folkestone, Kent.*
- 1938 ‡ MORLEY, B. D. Wragge, F.Z.S., F.L.S., *British Museum (Natural History), Cromwell-road, London, S.W. 7.*
- 1895 ‡ MORLEY, Claude, F.G.S., F.Z.S., *Monks Soham House, nr. Framlingham, Suffolk.*

- 1920 † MORRIS, H. M., M.Sc., *Agricultural Dept., Nicosia, Cyprus.*
- 1910 † MOSELY, Martin E., *British Museum (Natural History), Cromwell-road, London, S.W. 7.*
- 1911 † MOSS, The Rev. A. Miles, 8, *South-road, Kendal, Westmorland.*
- 1911 MOUNSEY, J. Jackson, *La Moye Golf Hotel, Jersey, Channel Islands.*
- 1931 MOUTIA, L. A., *Dept. of Agriculture, Reduit, Mauritius.*
- 1912 † MULLAN, Jal P., M.A., F.L.S., F.Z.S., Professor of Biology, *St. Xavier's College, Lamington-road, Grant-road Post, Bombay, India.*
- 1925 MUMFORD, E. P., M.A., M.Sc., *Box 802, Stanford University, California, U.S.A.*
- 1920 MUNRO, H. K., D.Sc., *P.O. Box 513, Pretoria, South Africa.*
- 1918 MUNRO, Prof. J. W., D.Sc. (COUNCIL, 1927-9), *Imperial College of Science, S. Kensington, S.W. 7.*
- 1914 † MURRAY, G. H., *Director of Agriculture, Rabaul, New Britain, Territory of New Guinea, via Australia.*
- 1922 † MUSGRAVE, A., *Australian Museum, Sydney, N.S.W., Australia.*
- 1943 MUSGRAVE, A. J., 13, *Loveday-road, London, W. 13.*
- 1945 MUSPRATT, Mrs. V. M., *Aicé Choko, St. Jean-de-Luz, Basses Pyrénées, France.*
- 1938 NARAYANAN AYYAR, E. S., M.A., *Dept. Entomology, Imperial Agricultural Research Institute, New Delhi, India.*
- 1926 † NASH, T. A. M., O.B.E., D.Sc., Ph.D., A.R.C.S., Medical Entomologist, *c/o Sleeping Sickness Service, Kaduna, Nigeria.*
- 1939 NATHAN, Leonard, 19, *Monton-street, Moss Side, Manchester 14.*
- 1938 NAUDÉ, Dr. T. J., *P.O. Box 513, Pretoria, South Africa.*
- 1919 † NELL, Louis, 122, *Palewell Park, East Sheen, London, S.W. 14.*
- 1919 NELSON, W. G. F. (COUNCIL, 1922-4), 64, *Lincoln's Inn Fields, London, W.C. 2.*
- 1923 † NEWLAND, Gordon, 166, *Piccadilly, London, W. 1.*
- 1943 † NEWMAN, L. Hugh, 41-2, *Salisbury-road, Beccles, Kent.*
- 1945 † NEWSON, A. J., 50, *Pomfret-avenue, Luton, Beds.*
- 1941 NEWTON, A. H., M.B., Ch.B., *Walland Cottage, Charles, nr. Barnstaple, N. Devon.*
- 1946 NIBLETT, M., 10, *Greenway, Wallington, Surrey.*
- 1921 † NICHOLSON, A. J., *Division of Economic Entomology, C.S.I.R., Box 109 P.O., Canberra, A.C.T., Australia.*
- 1946 NIELSEN, Dr. E. T., *Pilehuset, Frederiksvaerk, Denmark.*
- 1938 † NIXON, G. E. J., B.A. (COUNCIL, 1946-), *British Museum (Natural History), Cromwell-road, London, S.W. 7.*
- 1943 † NOBLE, James B., F.R.M.S., *Philomath, 174, Huyton-lane, Huyton, Lancs.*
- 1933 † NOTLEY, F. B., Major, M.Sc., *Coffee Research and Experimental Station, Lyamungu, Moshi, Tanganyika Territory.*
- 1941 † O'FARRELL, A. F. L., 90, *Woodwarde-road, London, S.E. 22.*
- 1937 † OLDROYD, H., B.A., *British Museum (Natural History), Cromwell-road, London, S.W. 7.*
- 1931 OLIVER, W. R. B., D.Sc., F.L.S., *Dominion Museum, Wellington, N.Z.*
- 1944 O'ROURKE, F. J., 45, *St. Kevins-park, Dartry, Dublin, Eire.*
- 1932 PAGDEN, H. T., M.A., *Senior Entomologist, Department of Agriculture, Kuala Lumpur, Malaya.*

- 1946 ‡ PAL, Rajindar, M.Sc., Ph.D., *Department of Entomology, London School of Hygiene and Tropical Medicine, Keppel-street, London, W.C. 1.*
- 1943 PALMER, A. E., 22, *St. Stevens-avenue, Ealing, London, W. 13.*
- 1916-36; 1944 PALMER, A. R., *Oving, The Avenue, Flitwick, Beds.*
- 1945 PALMER, J. L., O.B.E., F.R.G.S., *Chetwode, Mannamead, Plymouth.*
- 1931 PALMER, K. L., *Meadowlea, Gobowen, Shropshire.*
- 1935 ‡ PARMENTER, L., 94, *Fairlands-avenue, Thornton Heath, Surrey.*
- 1939 ‡ PARSONS, R. E. R., *Haflong, N.C. Hills, Assam, India.*
- 1934 PATERSON, Nellie F., Ph.D., M.Sc., *Dept. Zoology, Auckland University College, Auckland, New Zealand.*
- 1944 ‡ PATRICK, H. H., F.R.H.S., 5, *Marner-crescent, Radford, Coventry.*
- 1919 PATTON, Prof. W. S., M.B., *Endells, South Zeal, Okehampton, Devon.*
- 1944 ‡ PATTON-BETHUNE, Major C. L., M.C., 33, *Collingham-road, Earl's Court, London, S.W. 5.*
- 1945 PEACE, H. A., *Kiln-road, Hastoe, Tring, Herts.*
- 1922 ‡ PEARCE, The Rev. E. J., M.A., *Priory of St. Teilo, Church-terrace, Roath, Cardiff.*
- 1927 ‡ PEARMAN, J. V., 56, *Clifton Park-road, Clifton, Bristol 8.*
- 1939 PEARSON, E. O., c/o *Empire Cotton Growing Corporation, 1a, Harrington-road, South Kensington, London, S.W. 7.*
- 1945 PEARSON, H. M., B.Sc., *Bridge House, Obridge, Taunton, Somerset.*
- 1914 ‡ PENDLEBURY, Major Wm. J. de Monté, M.A., *The Old House, Canonbury, Shrewsbury.*
- 1931 ‡ PENNINGTON, K. M., *Michaelhouse, Balgowan, Natal, S. Africa.*
- 1933 ‡ PERKINS, Mrs. D. M. S., 95, *Hare-lane, Claygate, Esher, Surrey.*
- 1928 ‡ PERKINS, J. F., B.Sc. (COUNCIL, 1945-), 95, *Hare-lane, Claygate, Esher, Surrey.*
- 1903†† PERKINS, R. C. L., M.A., D.Sc., F.R.S., *Downside, Vale Down, Lydford, Devon.*
- 1907 † PERRINS, Capt. J. A. Dyson, *Newbury, Broadheath, Worcester.*
- 1938 PESCOFF, R. T. M., M.Agric.Sc., *Director, National Museum, Russell-street, Melbourne C. 1, Australia.*
- 1917 ‡ PICKARD-CAMBRIDGE, Arthur W., M.A., D.Litt., *St. Catherines, Marley, nr. Haslemere, Surrey.*
- 1945 PICKLES, Walter, 2, *Cypress Villas, Wakefield-road, Garforth, Leeds.*
- 1928 * PIEL, O.
- 1945 PIELOU, Douglas P., Ph.D., *International Red Locust Control Service, Abercorn, N. Rhodesia.*
- 1946 PILCHER, R. E. M., M.A., M.B., F.R.C.S., *The Meadows, 39, Spilsby-road, Boston, Lincs.*
- 1932 PINDER, J. E., *Melissa, Belle Vue-road, Salisbury.*
- 1944 ‡ PINNIGER, E. B., *Dalegarth, 5, Endlebury-road, Chingford, London, E. 4.*
- 1913 PLATT, E. E., 403, *Essenwood-road, Durban, Natal.*
- 1930 ‡ POTTER, C., B.Sc., Ph.D., D.Sc. (COUNCIL, 1941-3), *Rothamsted Experimental Station, Harpenden, Herts.*
- 1929 ‡ POTTS, W. H., B.A., *Dept. of Tsetse Research, Shinyanga, Lake Province, Tanganyika Territory.*
- 1938 POWELL, A. K., 3, *Upton-park, Slough, Bucks.*
- 1946 ‡ PRADHAN, S., D.Sc., *Rothamsted Experimental Station, Harpenden, Herts.*
- 1919 PRAED, C. W. M., *Castletop, Burley, Ringwood, Hants.*

- 1938 PRAED, H. W. Mackworth, *Castletop, Burley, Ringwood, Hants.*
- 1937 PRINGLE, J. A., *Port Elizabeth Museum and Snake Park, P.O. Box 914, Port Elizabeth, S. Africa.*
- 1936 PRÜFFER, Prof. Dr. Jan, *Institute of Zoology, University of Wilno, Zakretowa 23, Wilno, Lithuania.*
- 1939 ‡ PUGH, C. H. Wallace, *Derwent Dene, Oswestry, Salop.*
- 1944 QUIRKE, D. A., *Ministry Agric. Science, Monard, Co. Tipperary, Eire.*
- 1923 RAFF, Miss J. W., *School of Agriculture, University of Melbourne, Victoria, Australia.*
- 1938 RAINEY, R. C., 6, *High Bank Avenue, Purbrook, Portsmouth.*
- 1912 ‡ RAIT-SMITH, W. (COUNCIL, 1924-6; 1929-31), *Hurstleigh, Linkfield-lane, Redhill, Surrey.*
- 1924 ‡ RALFS, Miss E. M., B.A., F.Z.S. (COUNCIL, 1943-5), *British Museum (Natural History), Cromwell-road, London, S.W. 7.*
- 1946 ‡ RAMACHANDRA RAO, T., M.Sc., *Malaria Organisation, Bombay Province, Dharwar, India.*
- 1946 RAMAKRISHNA, V., B.Sc., *Medical Department, Malaria Section, B.N. Railway, Naupoda R.S., Vizagapatam District, India.*
- 1916 ‡ RAMCHANDRA RAO, Rao Bahadur Y., M.A., *Deputy Director, Bureau of Plant Protection, Dept. of Agriculture, New Delhi, India.*
- 1946 READ, G. Dick, M.A., M.D., 25, *Harley-street, London, W. 1.*
- 1946 ‡ REEVE, F. C., F.Z.S., 42, *Cromwell-road, Hove, Sussex.*
- 1939 ‡ REID, J. A., *Institute for Medical Research, Kuala Lumpur, Malaya.*
- 1946 ‡ RENNIE, P. J., A.R.C.S., 71, *Heathwood-gardens, London, S.E. 7.*
- 1898 REUTER, Professor Enzo, *Lönnrotsgatan 35 D, Helsinki, Finland.*
- 1910 ‡ DE RHÉ-PHILIPPE, G. W. V., *Quest End, Highfields, Ashted, Surrey.*
- 1936 RICE, Lt.-Col. E. M., M.D., D.T.M. & H., 2, *Greenhill-street, Charleston, S. Carolina, U.S.A.*
- 1927 ‡ RICHARDS, Arthur J., *Treuerhyn, Thursley, Godalming, Surrey.*
- 1933-39; 1946 ‡ RICHARDS, Mrs. M. J., 17, *Inglis-road, Ealing, London, W. 5.*
- 1924 ‡ RICHARDS, O. W., M.A., D.Sc. (V.-PRES., 1945; SECRETARY, 1937-40; COUNCIL, 1931-3, 1941, 1943-5), *Imperial College of Science & Technology, Prince Consort-road, S.W. 7.*
- 1920 ‡ RICHARDS, P. B., *Government Entomologist.*
- 1945 ‡ RICHARDS, W. S., *Queen's College, Oxford.*
- 1937 ‡ RICHARDSON, A., M.A., *Beaudesert Park, Minchinhampton, Glos.*
- 1920 ‡ RICHARDSON, A. W., 28, *Avenue-road, Southall, Middlesex.*
- 1933 RICHARDSON, J., 104, *Bothwell-street, Glasgow, C. 2.*
- 1945 RICHARDSON, W. A., O.B.E., B.A., B.Sc.(Eng.), D.Sc., F.R.S., *Derby Technical College, Normanton-road, Derby.*
- 1922 ‡ RICHARDSON, Rev. W. H., 16, *Stanley-road, Sudbury, Suffolk.*
- 1930 RIES, D. T., M.S., Ph.D., *Dept. Biology, Illinois State Normal University, Normal, Illinois, U.S.A.*
- 1912 ‡ RILEY, N. D., F.Z.S., SECRETARY, 1941- (TREASURER, 1939-40; SECRETARY, 1926-9; V.-PRES., 1929, 1940; COUNCIL, 1921-3, 1930, 1933-5, 1938), 7, *McKay-road, Wimbledon, S.W. 20, and British Museum (Natural History), S. Kensington, London, S.W. 7.*

- 1940 † RIPPER, Dr. W. E., *Sunbourn House, Harston, nr. Cambridge.*
- 1917 † ROBERTS, A. W. Rymer, M.A., *Applegarth, Cartmel, Grange-over-Sands, Lancs.*
- 1946 ROBERTS, Granville, *P.O. Ngong, Nairobi, Kenya.*
- 1927-1937, 1942 :
ROBERTS, J. E. H., O.B.E., M.B., F.R.C.S., *The Croft, Ottershaw, Surrey.*
- 1889-98, 1925 :
† ROBINSON, A., B.A., *Albury Cliff, Sheringham, Norfolk.*
- 1942 † ROCHE, P. J. L., M.R.C.S., L.R.C.P., *c/o D.M.S., Lagos, Nigeria.*
- 1921 † ROEBUCK, A., *Midland Agricultural College, Sutton Bonington, Loughborough.*
- 1946 ROEPKE, Prof. W., *Entomological Laboratory, Agricultural University, Berg 37, Wageningen, Holland.*
- 1922 † ROSA, A. F., M.D., 4, *Bellevue-crescent, Edinburgh.*
- 1932 † ROSEVEAR, D. R., *Forestry Dept., Port Harcourt, Nigeria.*
- 1930 † ROTHSCHILD, The Hon. Miriam (COUNCIL, 1939-41), *Ashton Wold, Peterborough.*
- 1913-20; 1944
† ROWDEN, A. O., *Rydon Crest, Countess Wear, Exeter, Devon.*
- 1903-1910, 1939 :
ROWLANDS, O. W., *Burleigh, Colwall, Malvern, Worcs.*
- 1943 RUDLAND, W. L., 211, *Caversham-road, Reading, Berks.*
- 1928 † RUSSELL, A. G. B., M.V.O., *Scar Bank House, Swanage, Dorset.*
- 1944 † RUSSWURM, A. D. A., 66, *Kensington Park-road, London, W. 11.*
- 1919 † ST. AUBYN, Capt. John G., 14, *Purley Knoll, Purley, Surrey.*
- 1946 SALMON, J. T., D.Sc., *Dominion Museum, Wellington, C. 3, New Zealand.*
- 1928 † SALT, George, Ph.D., D.Sc., Sc.D. (COUNCIL, 1942), *The Zoological Laboratory, Cambridge.*
- 1926 † SAMMAN, Miss M., *The Croft, North Ferriby, E. Yorks.*
- 1933 † SANDEMAN, R. G. C. C., *Dan-y-Parc, Crickhowell, Breconshire.*
- 1946 SANDRASAGARA, T. R., *Department of Entomology, National Museums of Ceylon, No. 7, Main-street, Jaffra, Ceylon.*
- 1945 SAUNDERS, Capt. Curtis, Ph.D., *Army Area Laboratory, Brooke Army Medical Centre, Fort Sam Houston, San Antonio, Texas, U.S.A.*
- 1910 † SAUNDERS, H. A., *Sherwood, Cliff-avenue, Swanage, Dorset.*
- 1923 † SAUNDERS, Prof. L. G., M.Sc., Ph.D., *Dept. of Biology, University of Saskatchewan, Saskatoon, Canada.*
- 1920 SCHARFF, J. W., M.D., D.Ph., *Government Public Health Dept., Penang, Straits Settlements.*
- 1930 † SCOTT, Lt.-Col. F. B., I.A., *Springfield, Hangersley Hill, Ringwood, Hants.*
- 1909 † SCOTT, Hugh, M.A., Sc.D., F.R.S., F.L.S. (V.-PRES., 1926; COUNCIL, 1925-7), *British Museum (Natural History), Cromwell-road, London, S.W. 7.*
- 1911 * SELOUS, C. F., M.D., M.R.C.S., L.R.C.P.
- 1923 † SEN, S. K., M.Sc., *c/o A. Sen, Esq., Deputy Collector, Agra P.O., India.*
- 1926 † SEVASTOPULO, D. G., *c/o Ralli Bros. Ltd., 25, Finsbury Circus, London, E.C. 2.*
- 1931 SEYDEL, Dr. C., *P.O. Box 712, Elizabethville, Katanga, Congo Belge.*
- 1945 † SHAPLAND, J. D., 2, *Lake-road, Shrivenham, nr. Swindon, Wilts.*
- 1946 SHARMA, R. C., *c/o Mr. K. O. Sharma, Leader Buildings, Allahabad (U.P.), India.*

- 1925 SHAW, F., c/o *National Bank of Egypt*, 6-7, *King William-street*, E.C. 4.
- 1923 SHERMAN, J. D., Jun., 132, *Primrose-avenue*, *Mt. Vernon*, *New York*, *U.S.A.*
- 1929 ‡ SHUTE, P. G., "*Litorea*," *Temple-road*, *Epsom*.
- 1946 ‡ SIDDORN, J. Walter, *Wareside*, 64, *Hamilton-road*, *Dollis Hill*, *London*, *N.W. 10*.
- 1946 SILLS, E. H., 32, *Woodside-avenue*, *Coventry*.
- 1911 ‡ SIMES, J. A., O.B.E. (COUNCIL, 1935-7), *Kingsley Cottage*, *Queen's-road*, *Loughton*, *Essex*.
- 1944 SIMMONDS, F. J., M.A., B.Sc., Ph.D., *Imperial College of Tropical Agriculture*, *Trinidad*, *British West Indies*.
- 1904 ‡ SIMMONDS, Hubert W., O.B.E., *Dept. of Agriculture*, *Suva*, *Fiji*.
- 1921 ‡ SIMMS, H. M., B.Sc., *Wellholme*, *Westminster-avenue*, *Chester*.
- 1933*† SIMON, P. H.
- 1928 SINTON, Brig. J. A., V.C., O.B.E., I.M.S., M.D., 39, *Hyde Park Gate*, *London*, *S.W. 7*.
- 1938 SKELLAM, J. G., *Ajanta*, *Stoneyfield Avenue*, *Milton*, *Stoke-on-Trent*.
- 1939 ‡ SLATER, N., 70, *Leam-terrace*, *Leamington Spa*.
- 1930 ‡ SMART, John, M.A., B.Sc., Ph.D., D.Sc. (COUNCIL, 1940-2), *Department of Zoology*, *Downing-street*, *Cambridge*.
- 1920 ‡ SMEE, C., *Government Entomologist*, *Zomba*, *Nyasaland*.
- 1911*† SMITH, B. H.
- 1936 ‡ SMITH, K., F.L.A., *North Finchley District Library*, *London*, *N. 12*.
- 1943 SMITH, P. Siviter, 21, *Melville Hall*, *Holly-road*, *Edgbaston*, *Birmingham*, 16.
- 1919 SMITH, S. Gordon, F.L.S., *Estyn*, *Boughton*, *Cheshire*.
- 1918 † SMITH, W. P., F.Z.S., *Bexton House*, *Knutsford*, *Cheshire*.
- 1940 ‡ SNELGROVE, L. E., *The Beeches*, *Bleadon*, *Weston-super-Mare*, *Somerset*.
- 1945 ‡ SNELL, B. B., *Woodsome*, *Plymyard-avenue*, *Bromborough*, *Cheshire*.
- 1946 SPENCE, T., *Ministry of Agriculture and Fisheries*, *Veterinary Laboratory*, *Weybridge*, *Surrey*.
- 1908 ‡ SPEYER, E. R., M.A., *Experimental and Research Station*, *Cheshunt*, *Herts*.
- 1935 ‡ STAINER, J., *Longmynd*, *Cherry Point*, *Cobble Hill*, *Vancouver Island*, *B.C.*, *Canada*.
- 1930 STALEY, John, *British Mosquito Control Institute*, *Hayling Island*, *Hants*.
- 1943 STANIER, E., 39, *Calvert-street*, *Derby*.
- 1939 STANLEY, F. C., 11, *Auckland Road-east*, *Southsea*, *Hants*.
- 1945 ‡ STANLEY, Peter W., "*Trigintha*," *Watford-road*, *King's Langley*, *Herts*.
- 1924 ‡ STANLEY SMITH, F., *Hatch House*, *Pilgrims Hatch*, *Brentwood*, *Essex*.
- 1928 ‡ STEER, W., 3, *Granville-road*, *Timperley*, *Cheshire*.
- 1910 ‡ STENTON, R., 22, *Milton-road*, *Harpندن*, *Herts*.
- 1943 STEPHENS, Capt. J. A., 44, *Mount-road*, *Chatham*.
- 1938 STEVENSON, Capt. R. H. R., *P.O. Hillside*, *Bulawayo*, *Southern Rhodesia*.
- 1923 STEWART, A. M., 8, *Ferguslie*, *Paisley*, *N.B.*
- 1920 ‡ STIDSTON, Engr.-Capt. S. T., R.N., *Ashe*, *Ashburton*, *S. Devon*.
- 1910 ‡ STONEHAM, Lt.-Col. Hugh F., O.B.E., F.Z.S., M.B.O.U., *The Stoneham Museum*, *Kitale*, *Kenya Colony*.
- 1945 ‡ STOUGHTON-HARRIS, G., M.A., F.C.A., 11, *Langdale-close*, *Bury-lane*, *Horsell*, *Woking*, *Surrey*.

- 1945 STRICKLAND, A. H., B.A., *Guestling House, Guestling, Sussex, and W. African Cacao Research Inst., Tafo, Gold Coast, British West Africa.*
- 1938 SWEETMAN, Dr. Harvey L., *Massachusetts State College, Amherst, Mass. U.S.A.*
- 1925 SWIERSTRA, C. J., *Director, Transvaal Museum, Pretoria.*
- 1920 ‡ SYMS, Edgar E., 22, *Woodlands-avenue, Wanstead, E. 11.*
- 1941 TALHOUK, Abdul Mon'im S., *Aley, Lebanon, Syria.*
- 1916 ‡ TATCHELL, L. S., *Rockleigh Cottage, Swanage, Dorset.*
- 1945 TAYLOR, A. S., 12, *Frenchwood-avenue, Preston, Lancashire.*
- 1936 * TAYLOR, F. H.
- 1931 ‡ TAYLOR, J. Sneyd, M.A., P.O. Box 23, *Fort Beaufort, Cape Province, S. Africa.*
- 1945 ‡ TAYLOR, T. H. C., D.Sc., *Imperial Institute of Entomology, British Museum (Natural History), London, S.W. 7.*
- 1914 TEMPERLEY, Reginald, *The Manor House, Merricott, Somerset.*
- 1946 ‡ TEMPLE, Miss Vere, *King's Chase, Tollard Royal, Salisbury, Wilts.*
- 1944 THOMPSON, G. H., *St. Edmund Hall, Oxford, and 66, Clifton-road, Rugby.*
- 1925 THOMPSON, H. W., M.Sc., *Dept. of Agriculture, The University, Leeds 2.*
- 1936 THOMPSON, J. A., *Henfryn Hall, Dyserth, N. Wales.*
- 1928 ‡ THOMPSON, W. R., Ph.D., D.Sc., F.R.S. (COUNCIL, 1938-40), *Parasite Laboratory, Belleville, Ontario, Canada.*
- 1938 THOMSON, Dr. R. C. Muirhead, *The Manse, Kilmaurs, By Kilmarnock, Scotland.*
- 1943 THOMSON, W. E. F., *Dept. of Tsetse Research, Abercorn, Northern Rhodesia.*
- 1892 THORNLEY, The Rev. A., M.A., F.L.S., F.R.Met.Soc., *St. Anaels, Carbis Bay, Cornwall.*
- 1946 THORNTON, J. N., 123, *Otley Old-road, Leeds 6.*
- 1926 ‡ THORPE, W. H., M.A., Sc.D. (V.-PRES., 1944; COUNCIL, 1934-6, 1942-4), *Zoological Laboratory, The Museums, Cambridge.*
- 1945 ‡ THORSTEINSON, Lt. A. J., *Biological Field Station, London-road, Slough, Bucks.*
- 1941 TIMMS, Cartwright, 524a, *Moseley-road, Birmingham 12.*
- 1920 TINSLEY, Joseph, *Rose Dene, Oakfields-road, Knebworth, Herts.*
- 1897 ‡ TOMLIN, J. R. le B., M.A. (COUNCIL, 1911-13), 23, *Boscobel-road, St. Leonards-on-Sea.*
- 1920-1932, 1937 :
TONGE, A. E., *Ashville, Trafford-road, Alderley Edge, Cheshire.*
- 1928 ‡ TOTTENHAM, Rev. C. E., M.A. (COUNCIL, 1943-5), 39, *Eltisley-avenue, Cambridge.*
- 1930 ‡ TURK, F. A., *Shang-Ri-La, Reskadinnick, Camborne, Cornwall.*
- 1942 TURNER, A. H., F.R.Met.Soc., F.Z.S., *Forest Drove, Bickenhall, Hatch Beauchamp, Taunton, Somerset.*
- 1898 ‡ TURNER, A. J., M.D., *Dauphin-street, Highgate Hill, Brisbane, Queensland, Australia.*
- 1893 ‡ TURNER, Henry Jerome, F.R.H.S. (V.-PRES., 1930; LIBRARIAN, 1921-9; COUNCIL, 1910-12, 1930), *Latemar, West Drive, Cheam, Surrey.*
- 1920 ‡ UVAROV, B. P., C.M.G., D.Sc. (COUNCIL, 1938-40), *British Museum (Natural History), Cromwell-road, S.W. 7.*

- 1945 VALLETTA, Anthony, 214, *Msida-street, B'Kara, Malta.*
- 1946 ‡ VANDERPLANK, F. L., 74, *Downs Park East, Westbury-park, Bristol 6.*
- 1939 ‡ VAN EMDEN, F., 20, *Wilton-grove, Wimbledon, S.W. 19.*
- 1944 VAN SOMEREN, G. R. Cunningham, *Public Health Dept., Municipal Council of Nairobi, P.O. Box 651, Nairobi, Kenya Colony.*
- 1922 ‡ VAN SOMEREN, V. G. L., C.M.Z.S., *Box 1682, Nairobi, Kenya Colony.*
- 1933 VAN SON, G., M.Sc., *P.O. Box 413, Transvaal Museum, Pretoria, South Africa.*
- 1934 ‡ VARLEY, G. C., M.A., Ph.D., *Dept. of Zoology, King's College, Newcastle-on-Tyne 2.*
- 1904†‡ VAUGHAN, Capt. W., *Albion Press, 50½, Princess-street, Winnipeg, Manitoba, Canada.*
- 1914 ‡ VEITCH, Robert, B.Sc., *Dept. of Agriculture, Brisbane, Australia.*
- 1935 VERITY, R., M.D., *Caldine, Firenze, Italy.*
- 1933 VESEY-FITZGERALD, Desmond, *Nouale Cottage, Ringwood, Hants.*
- 1938 ‡ VINSON, J., *Moka, Mauritius.*
- 1940 ‡ WADSWORTH, R. V., 48, *Bunbury-road, Northfield, Birmingham.*
- 1946 ‡ Wafa, A. K., *Rothamsted Experimental Station, Harpenden, Herts.*
- 1897 ‡ WAINWRIGHT, C. J., F.Z.S. (COUNCIL, 1901, 1912-14), 50, *Christchurch-road, Bournemouth.*
- 1918 WALFORD, L. J., *The Cavalry Club, Piccadilly, London, W. 1.*
- 1935 WALKER, Dr. E. M., Professor of Invertebrate Zoology, *Dept. of Biology, University of Toronto, Toronto, Canada.*
- 1944 WALTON, A. M., 275, *Croxed-road, West Dulwich, London, S.E. 21.*
- 1939 ‡ WALTON, G. A., M.B., Ch.B., *Blue Haze, Horningsham, Warminster, Wilts.*
- 1910 ‡ WARD, John J., *Natura, Woodland-avenue, Coventry.*
- 1908 ‡ WARREN, B. C. S., 3, *Augusta Mansions, Folkestone, Kent.*
- 1937 ‡ WATKINS, N. A., M.A., 9, *Druid-road, Stoke Bishop, Bristol 9.*
- 1945 WATKINS, O. G., 20, *Torr View-avenue, Peverell, Plymouth.*
- 1921 WATKINSON, The Rev. Canon G., M.A., *Woodfield, Hipperholme, nr. Halifax.*
- 1918 WATSON, J. H., 20, *St. Paul's-road, Withington, Manchester.*
- 1933 WATTISON, J. T., F.G.S., 8, *Abbey Foregate, Shrewsbury.*
- 1944 ‡ WAY, M. J., *Hazelbank, Leyton Green, Harpenden, Herts.*
- 1938 ‡ WEATHERILL, Pilot-Officer L. H., 8, *Palace Gardens-terrace, London, W. 8.*
- 1945 ‡ WEBB, J. E., B.Sc., Ph.D., *Natural History Department, Marischal College, Aberdeen.*
- 1933 ‡ WELTI, A. (TREASURER, 1942- ; COUNCIL, 1939-41), *Foxbush, Tillingdown-lane, Caterham, Surrey.*
- 1933 ‡ WELTI, Mrs. I. M. T., *Foxbush, Tillingdown-lane, Caterham, Surrey.*
- 1935 ‡ WESTROPP, F. G. M., 19, *Church-row, Hampstead, N.W. 3.*
- 1943 ‡ WHICHER, Leonard S., 22, *Bell Hill, Petersfield, Hants.*
- 1910 ‡ WHITE, E. Barton, M.R.C.S., *St. Merryn, Braunton, N. Devon.*
- 1946 WHITE, K. M., *Hazelhurst, Blackpool Corner, Axminster, Devon.*
- 1918 ‡ WHITE, Ronald Senior, F.R.S.E., *Malaria-ologist, Bengal-Nagpur Railway-house, Calcutta, India.*
- 1923 ‡ WHITFIELD, F. G. Sarel, D.I.C., F.R.M.S., 7, *Cadogan-street, London, S.W. 3.*
- 1913†‡ WHITLEY, P. N., *Brantwood, Halifax ; and New College, Oxford.*
- 1944 WHITWORTH, J. W., F.Z.S., 334, *Leeds-road, Bradford, Yorks.*

- 1926 ‡ WIGGLESWORTH, V. B., M.A., B.Ch., M.D., F.R.S. (V.-PRES., 1934, 1939; COUNCIL, 1932-4, 1938-40), *The Gables, Mount Pleasant, Cambridge.*
- 1923 WIGHTMAN, A. J. C., *Aurago, Pulborough, Sussex.*
- 1936 WILBRAHAM, T. W., *The Cottage, Grinshill, Shrewsbury.*
- 1923 WILKINSON, Harold, *Dept. of Agriculture, Nairobi, Kenya Colony.*
- 1911 ‡ WILLIAMS, C. B., M.A., D.Sc. (V.-PRES., 1942, 1945, 1946; COUNCIL, 1934-6, 1942, 1944-6), *Rothamsted Experimental Station, Harpenden, Herts.*
- 1943 WILLIAMS, E. F., *Warley Lea, Brentwood, Essex.*
- 1915 ‡ WILLIAMS, H. B., LL.D. (V.-PRES., 1944, 1946; COUNCIL, 1944-6), *Croft Point, Bramley, Surrey.*
- 1943 WILLIAMS, Joseph L., A.B., A.M., Ph.D., Box 283, *Howard University, Washington (1), D.C., U.S.A.*
- 1945 ‡ WILLIAMS, L., 89, *Riverdale-road, Sheffield 10, Yorks.*
- 1934 WILSON, F., c/o *Division of Economic Entomology, Box 109, Post Office, Canberra, A.C.T., Australia.*
- 1937 ‡ WILTSHIRE, E. P., c/o *Foreign Office, Downing-street (For bag to Cairo), S.W. 1.*
- 1938 ‡ WINSTON, G. D., M.R.C.S., L.R.C.P., 85, *Oxford-gardens, London, W. 10.*
- 1928 WINTER, A. E., *Langton Lodge, Scotton, Knaresboro, Yorks.*
- 1926 ‡ WOMERSLEY, H., 43, *Carlisle-road, Westbourne Park, Adelaide, S. Australia.*
- 1905 WOODBRIDGE, F. C., *Briar Close, Latchmore-avenue, Gerrard's Cross S.O., Bucks.*
- 1925 ‡ WOODCOCK, A. J. A., M.Sc., *Rhianva, 65, Rock-avenue, Gillingham, Kent.*
- 1943 ‡ WOODCOCK, G. S., *Ivy House, Bishops Hall, Brentwood, Essex.*
- 1935 WOODHOUSE, L. G. O., *Mercantile Bank of India, Ltd., 15, Gracechurch-street, E.C. 3.*
- 1946 WOODS, G. F., 25, *Gertrude-street, Nelson, Lancs.*
- 1944 WOODVILLE, H. C., *Mount Farm Cottage, Chandler's Corner, Haresfield, nr. Stonehouse, Glos.*
- 1925 ‡ WOODWARD, Capt. G. C., R.N., *The Red House, 10, Bordyke, Tonbridge, Kent.*
- 1921 WOOLLETT, G. F. C., *Parklands, Merrow, Guildford, Surrey.*
- 1926 ‡ DE WORMS, The Baron, Ph.D., M.A., A.I.C., *Milton Park, Egham, Surrey.*
- 1946 WORTHINGTON-STUART, Brian, 51, *Albemarle-road, Beckenham, Kent.*
- 1927 WRIGHT, A. E., *Brunleigh, Kent Bank-road, Grange-over-Sands.*
- 1936 ‡ YARROW, I. H. H., M.A., Ph.D., D.I.C., *Agricultural Advisory Office, 7, Redlands-road, Reading, Berks.*

BENEFACTIONS.

Owing to the paper shortage a full list of benefactions is not printed this year. The following is a list of the donations of Twenty Pounds and upwards received during 1946.

1946.

THE ROYAL SOCIETY, £240, from the Government Grant in aid of Scientific Publications.
 Prof. T. D. A. COCKERELL, £200, donation to Library Catalogue Fund.
 Mr. H. E. ANDREWES, his entire library of works on Coleoptera.

PRINTED FOR THE SOCIETY BY RICHARD CLAY AND COMPANY, LTD.,
BUNGAY, SUFFOLK.